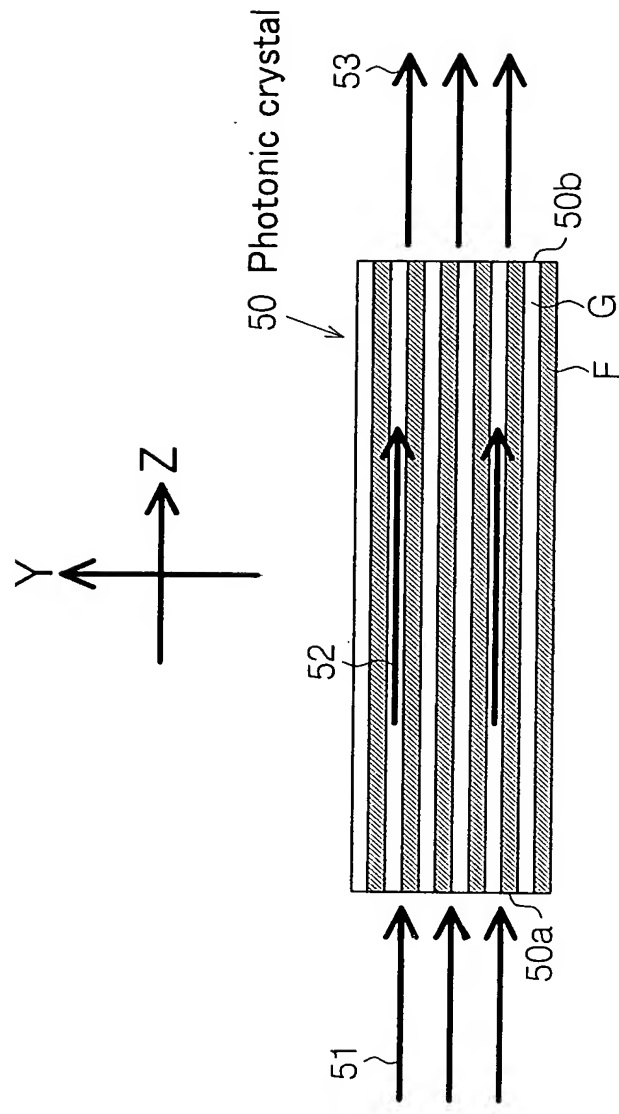


Fig.1



1st photonic band

2nd photonic band

3rd photonic band

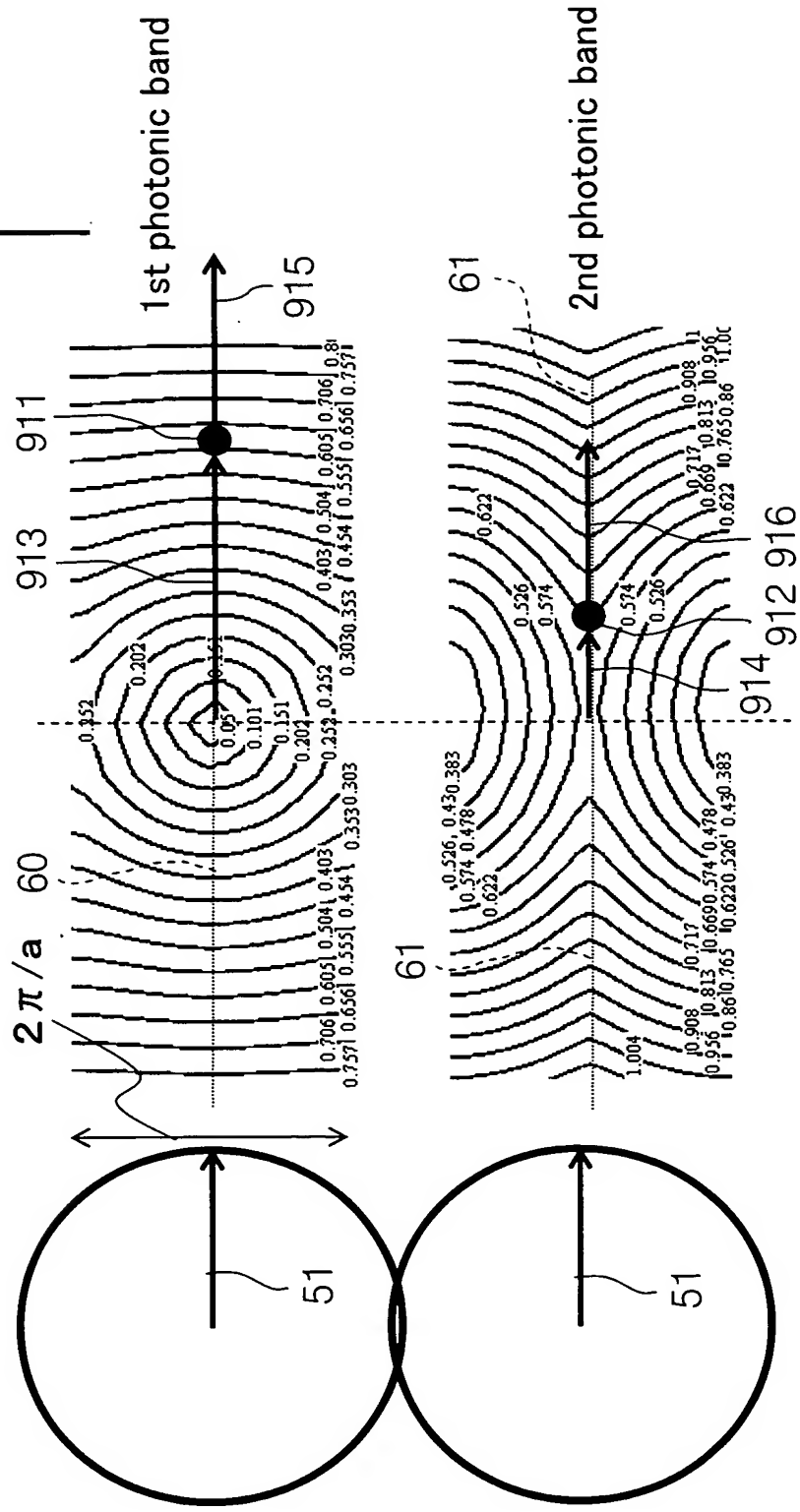


Fig.4

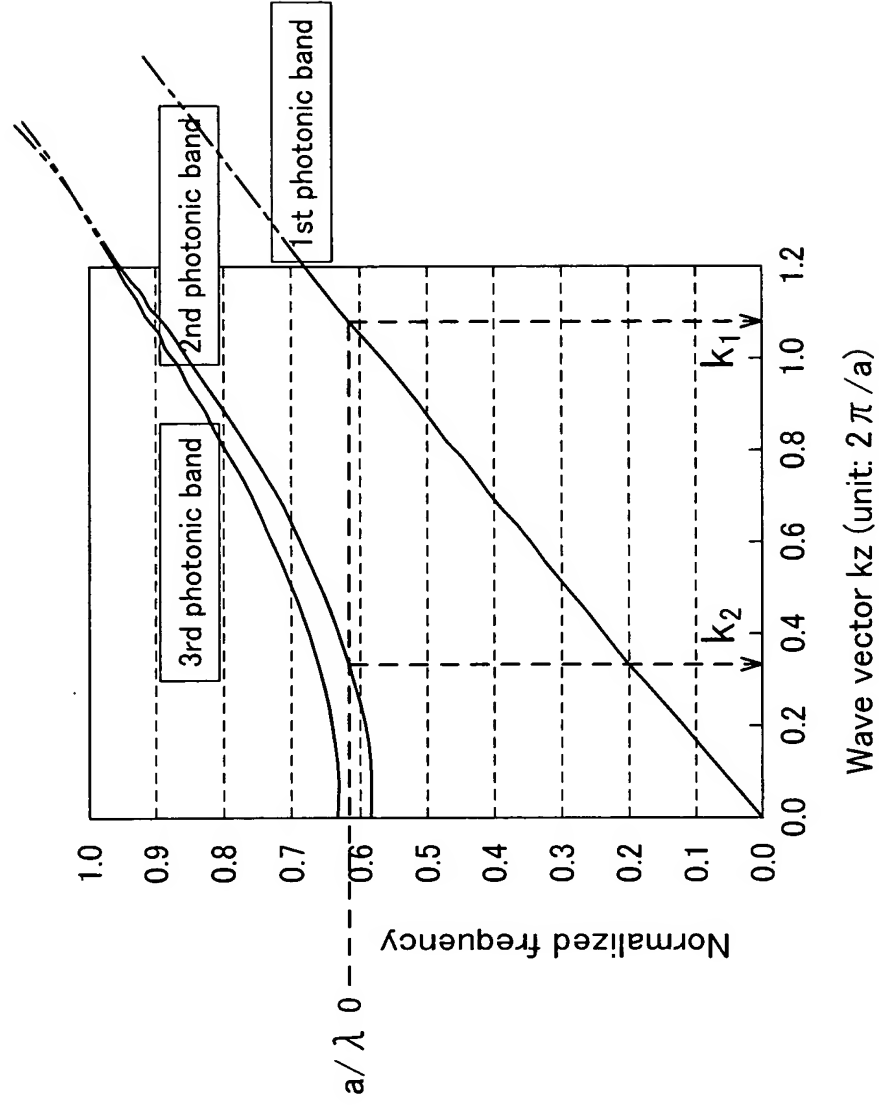
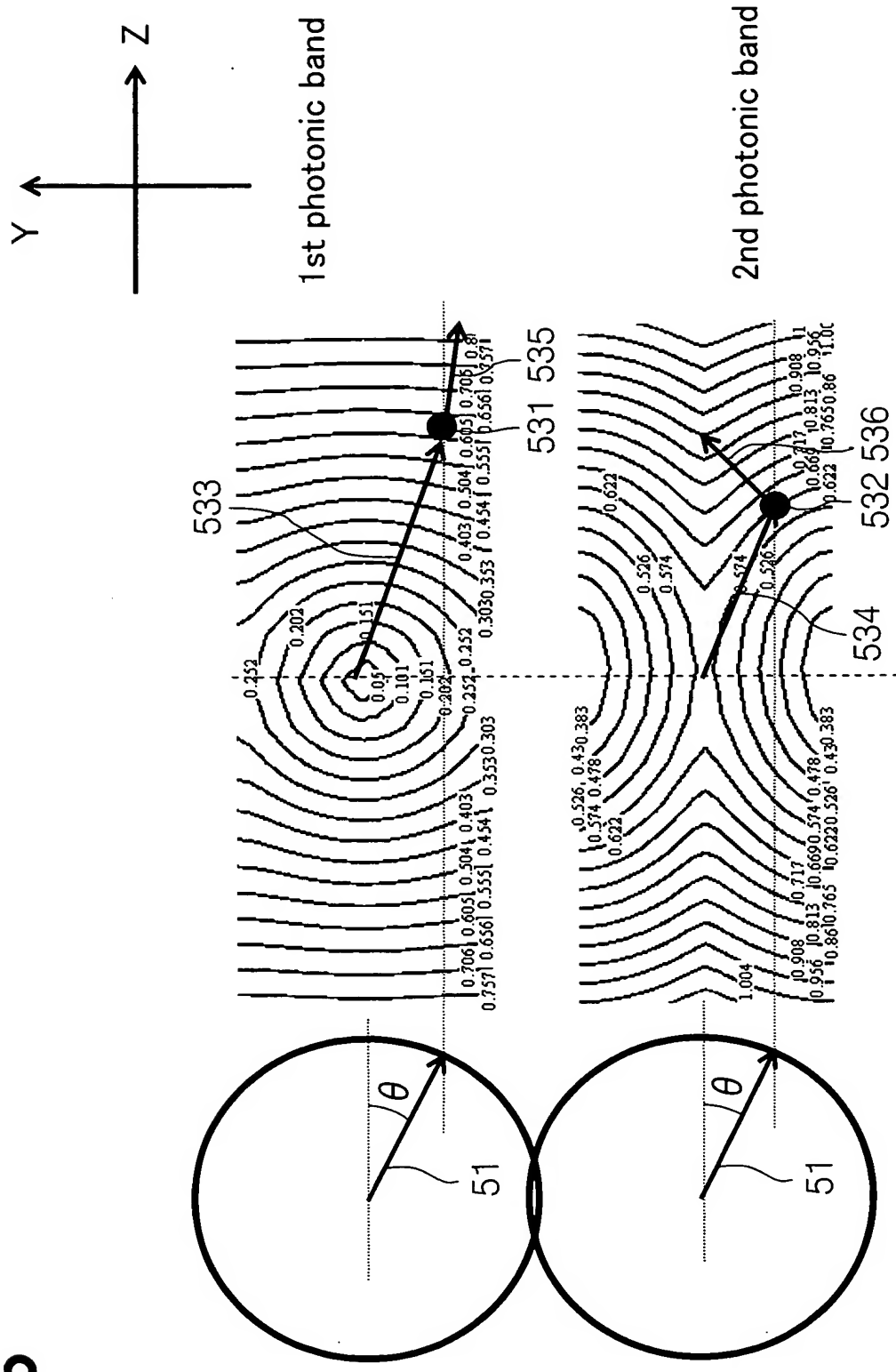


Fig. 5



The diagram shows two identical circles that overlap. A horizontal dotted line passes through the center of each circle. In the left circle, a vector labeled \vec{v}_1 originates from the center and points towards the upper-right intersection of the two circles. An arc indicates the angle between the horizontal dotted line and this vector is θ . In the right circle, a vector labeled \vec{v}_2 originates from the center and points towards the same upper-right intersection. An arc indicates the angle between the horizontal dotted line and this vector is also θ .

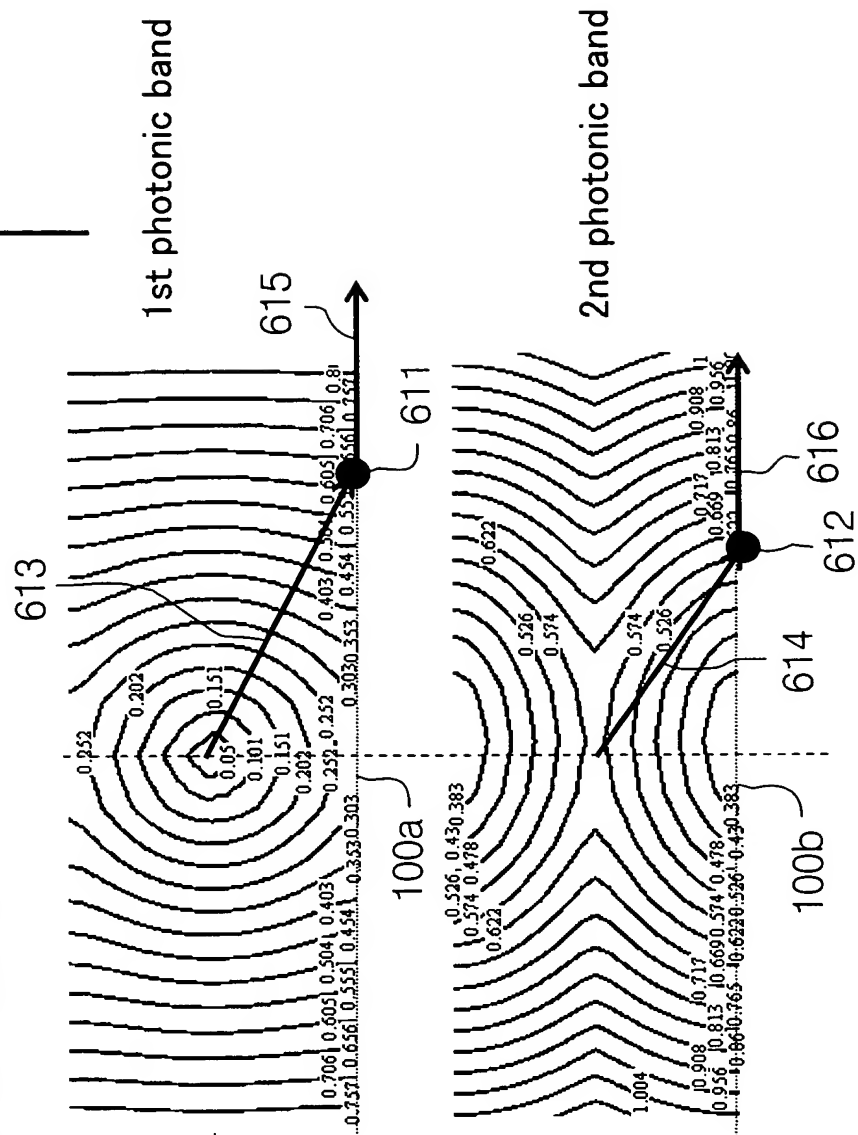


Fig.7

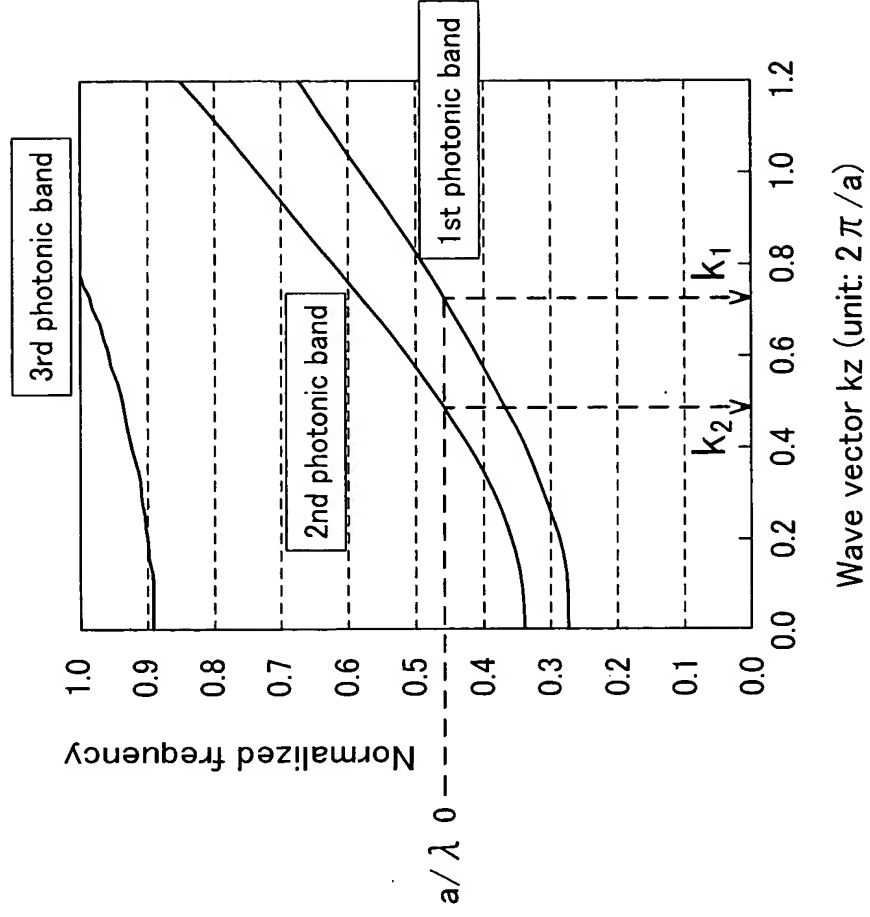


Fig.8

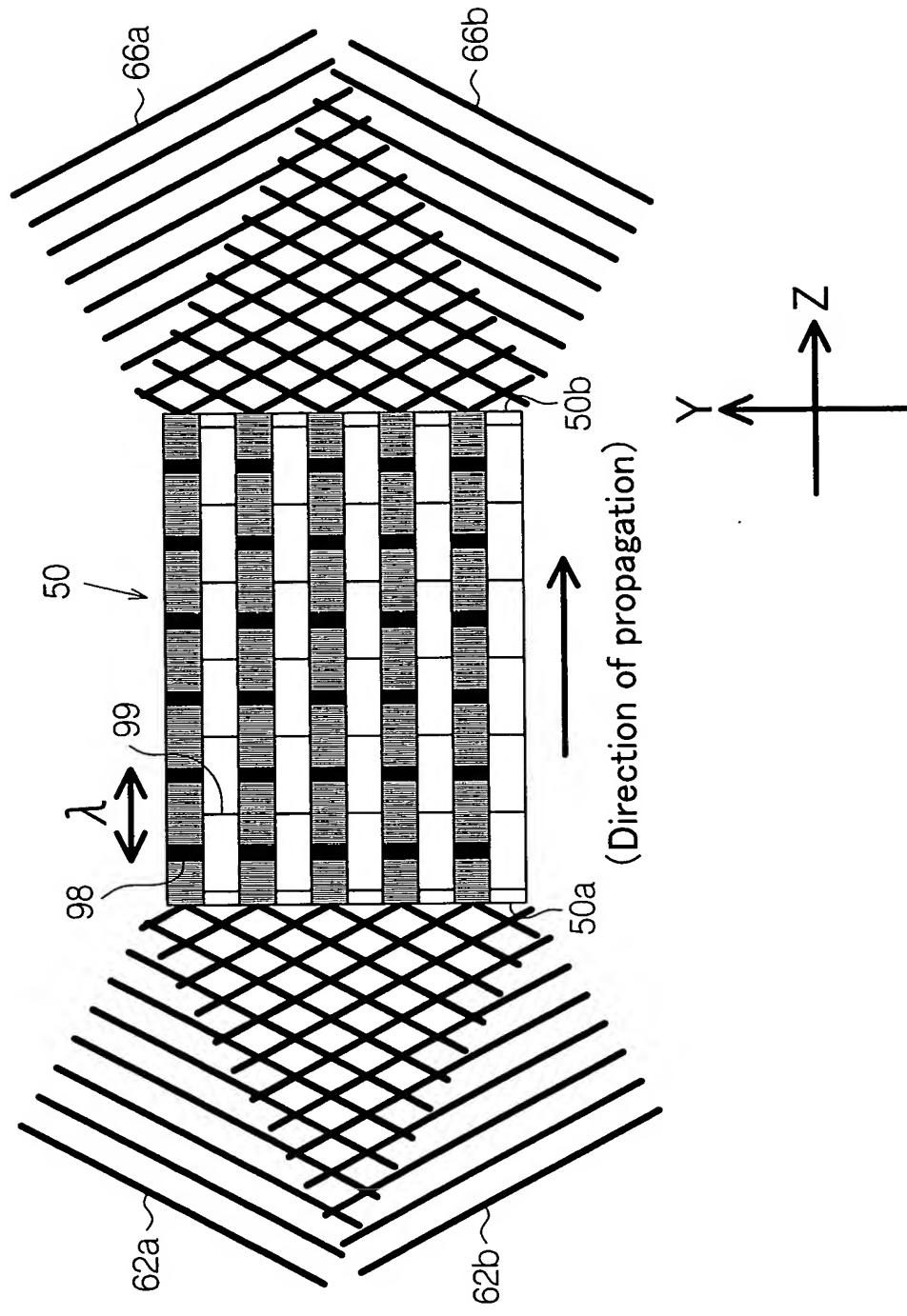


Fig. 9

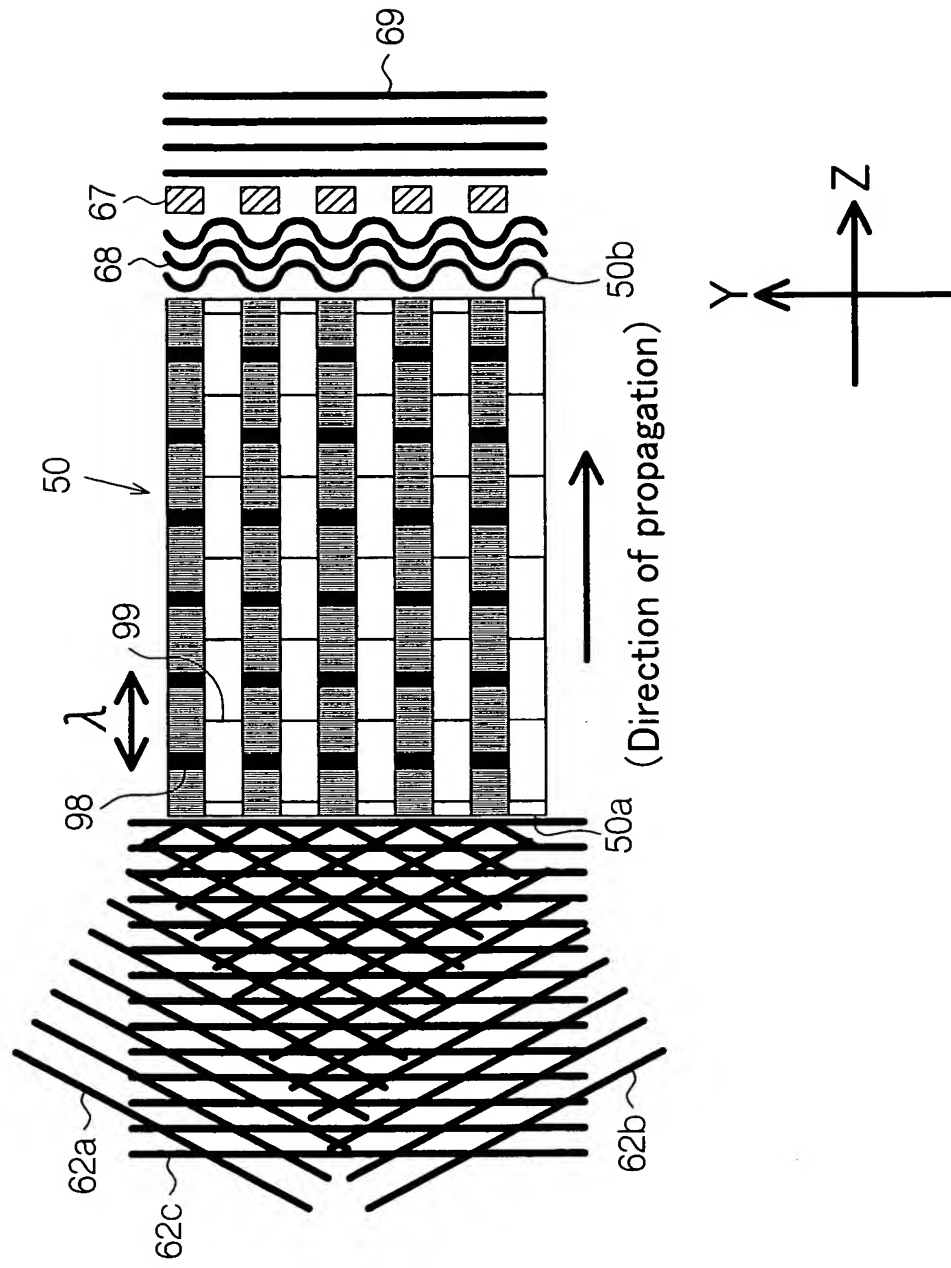


Fig.10

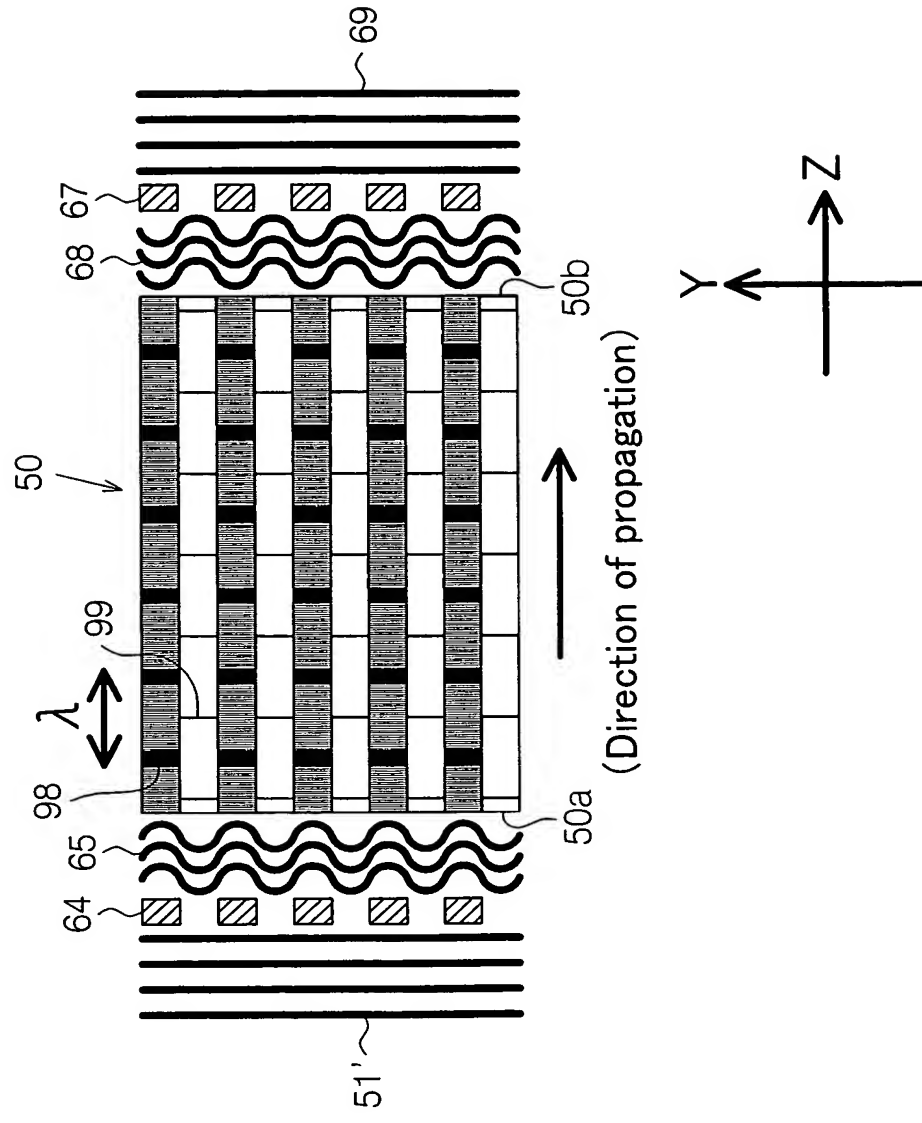


Fig.11

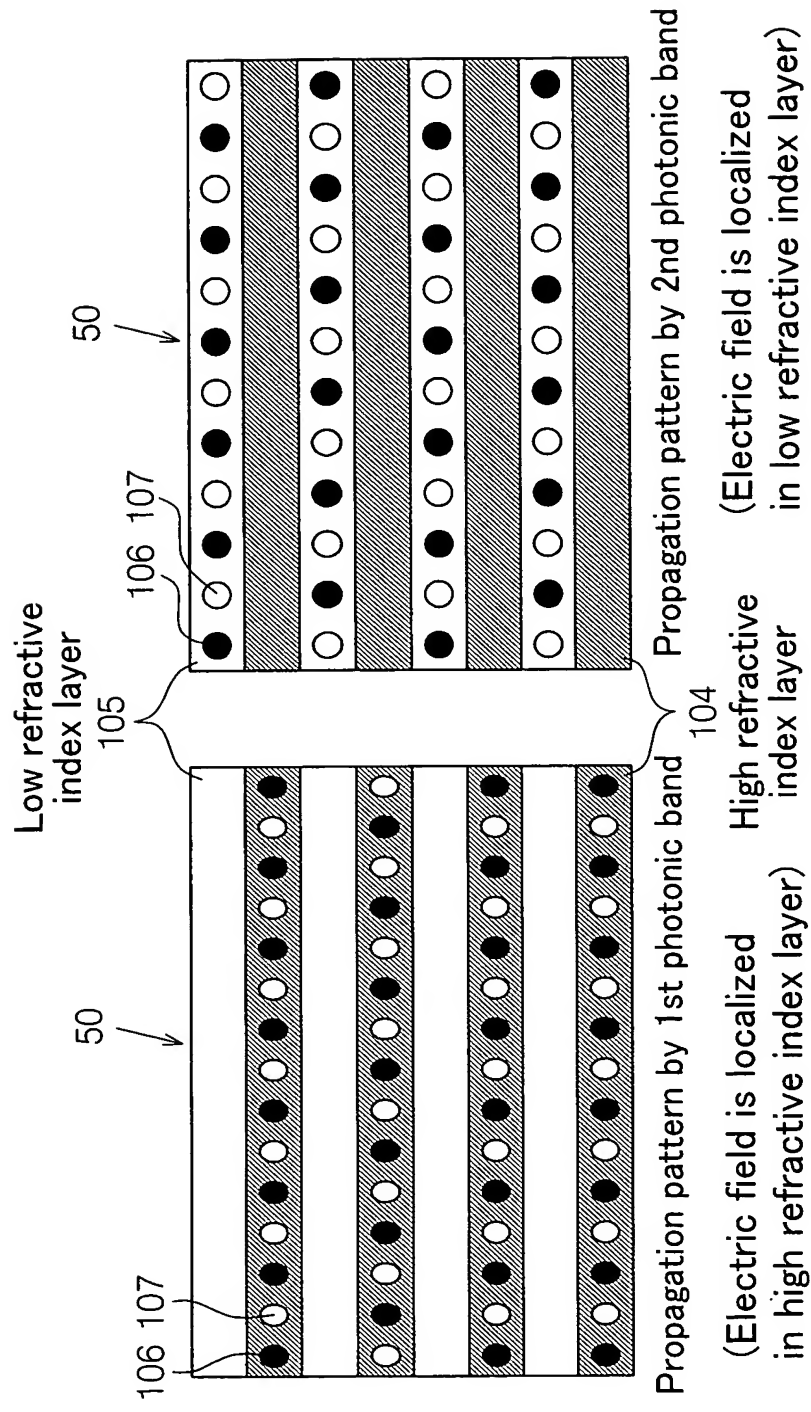
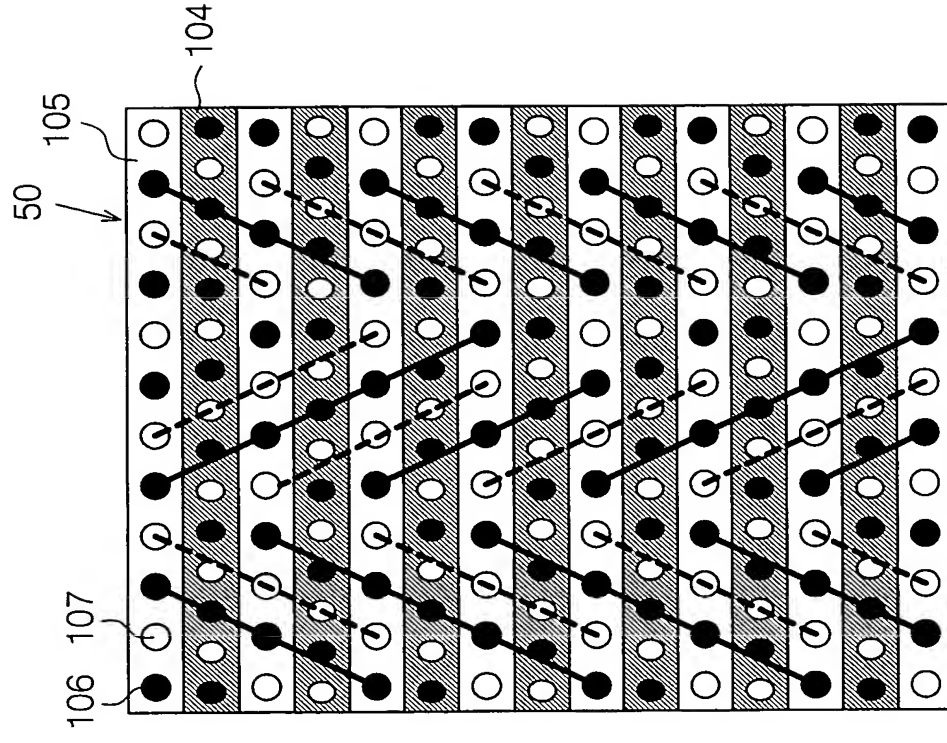


Fig.12



Propagation pattern by 1st and 2nd photonic bands

Fig. 13

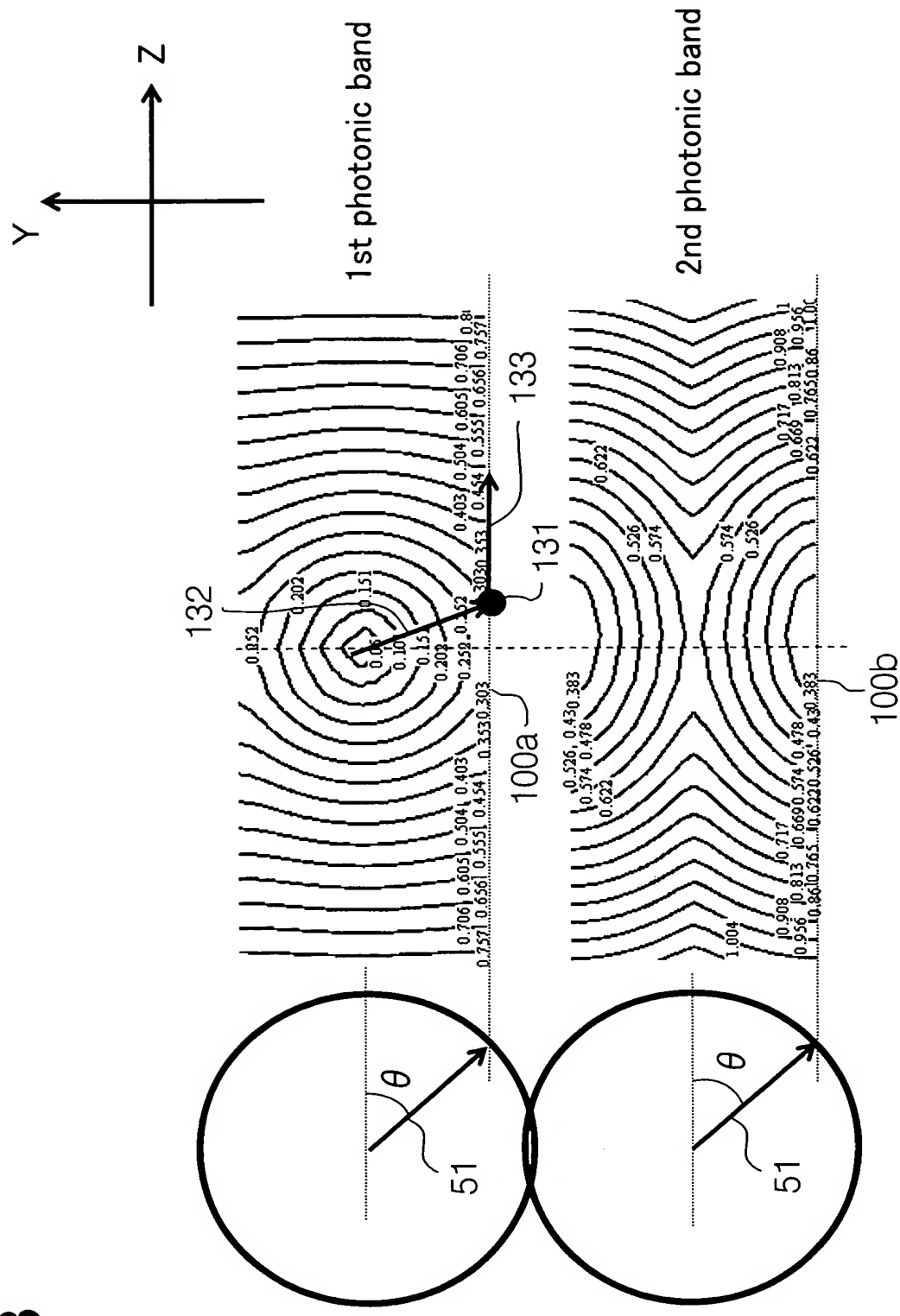


Fig.14

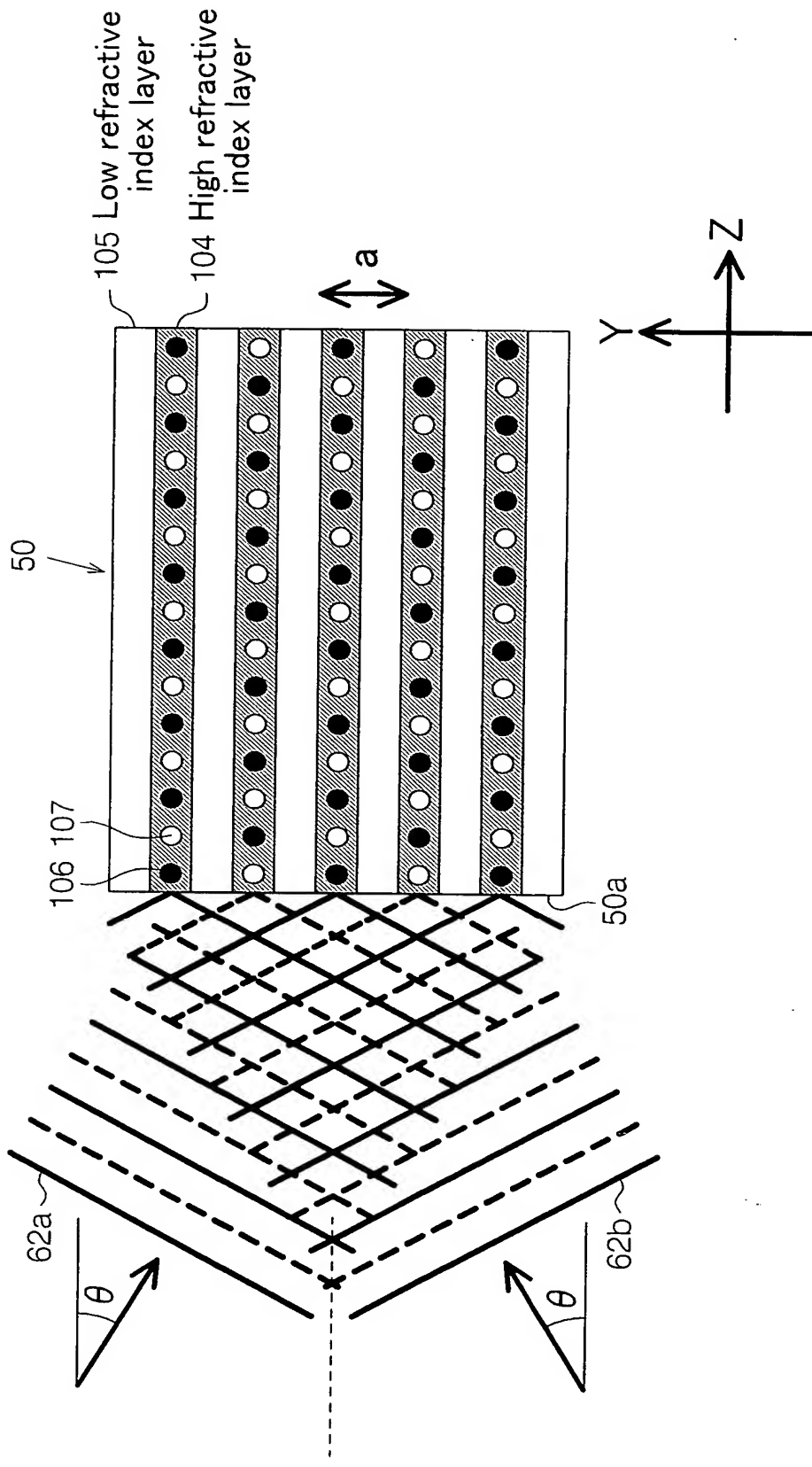


Fig.15

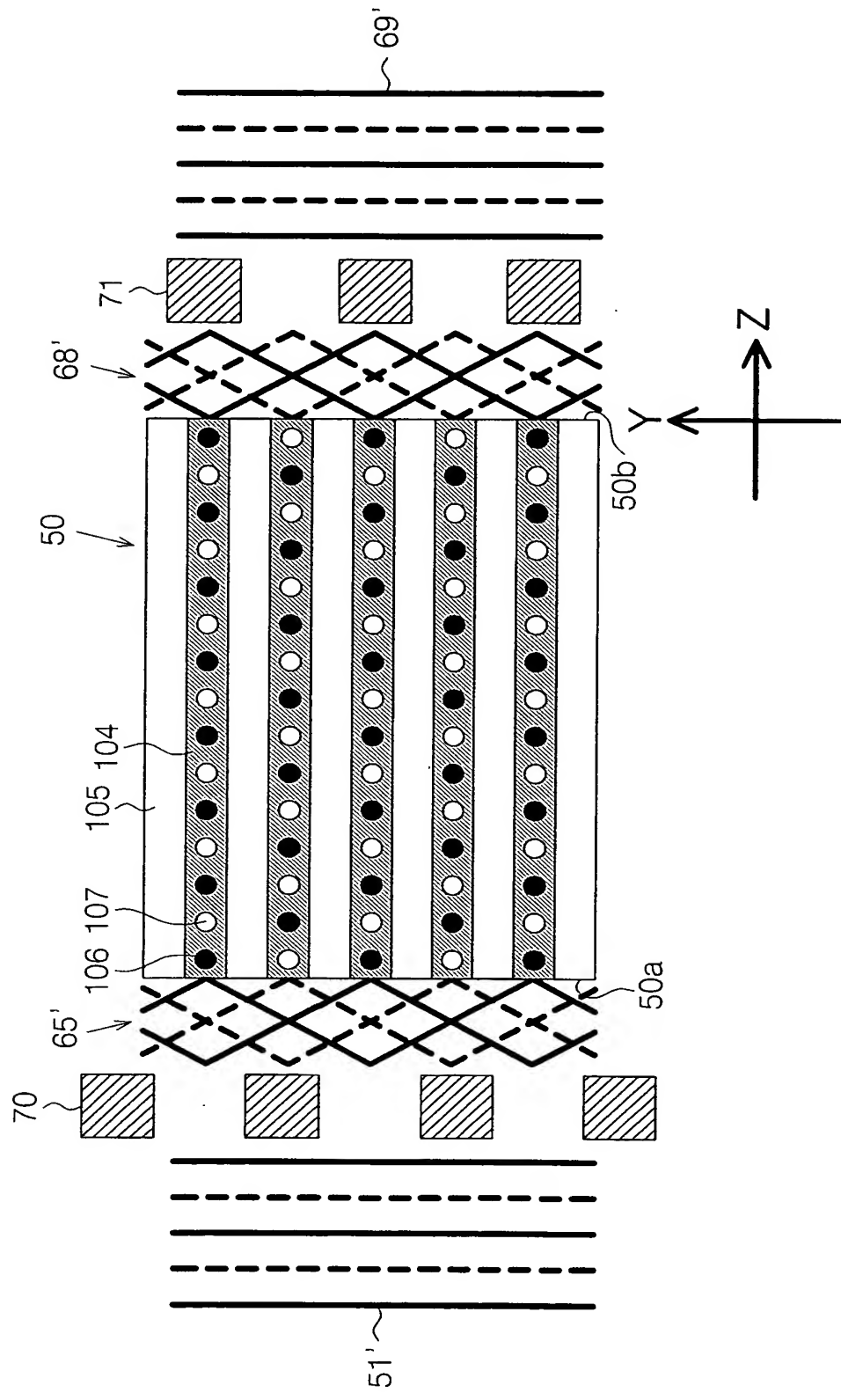


Fig. 16

Directions of diffracted light depends on position of end facet in zigzag propagation pattern.

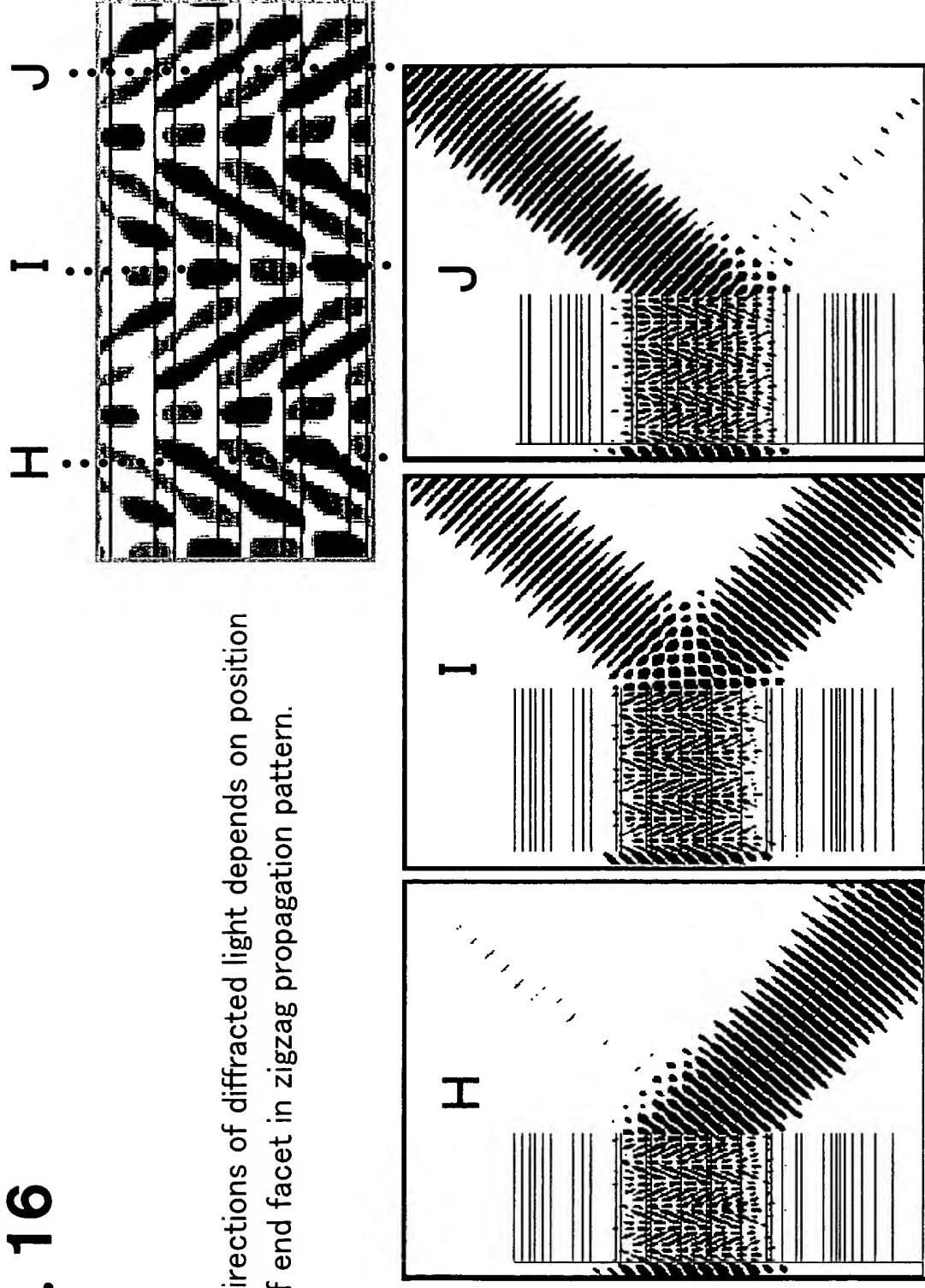


Fig. 17

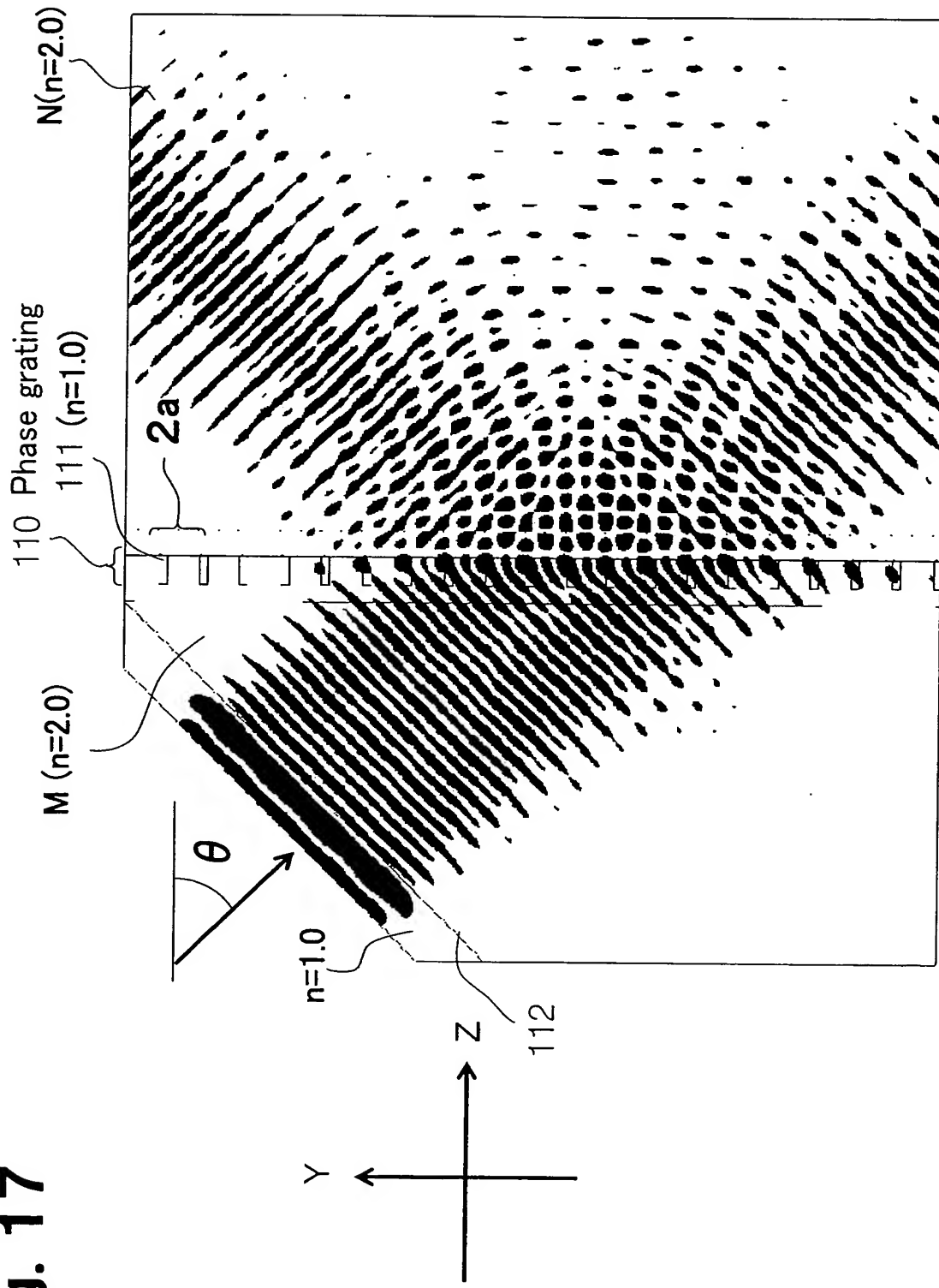


Fig. 18

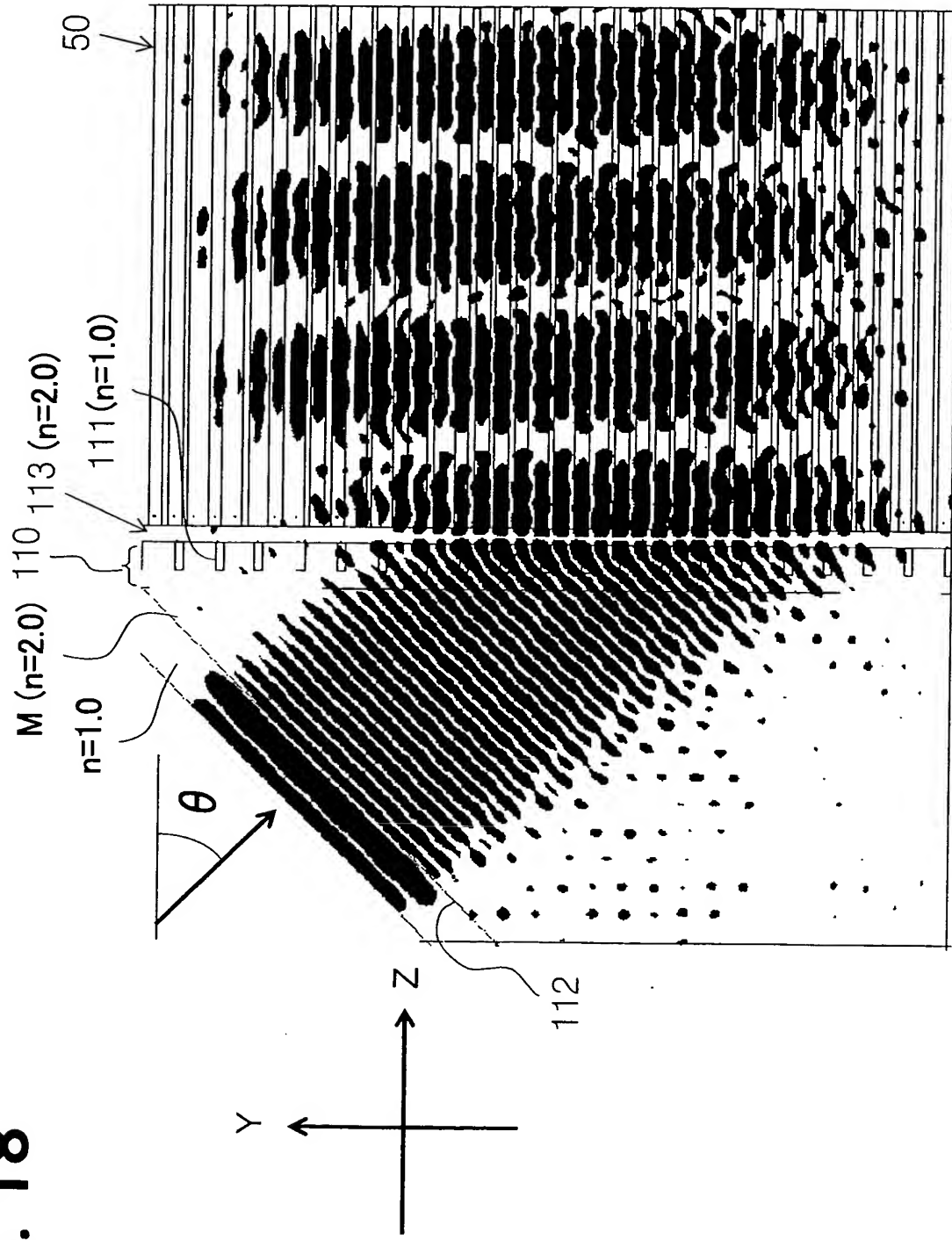


Fig. 19(a)

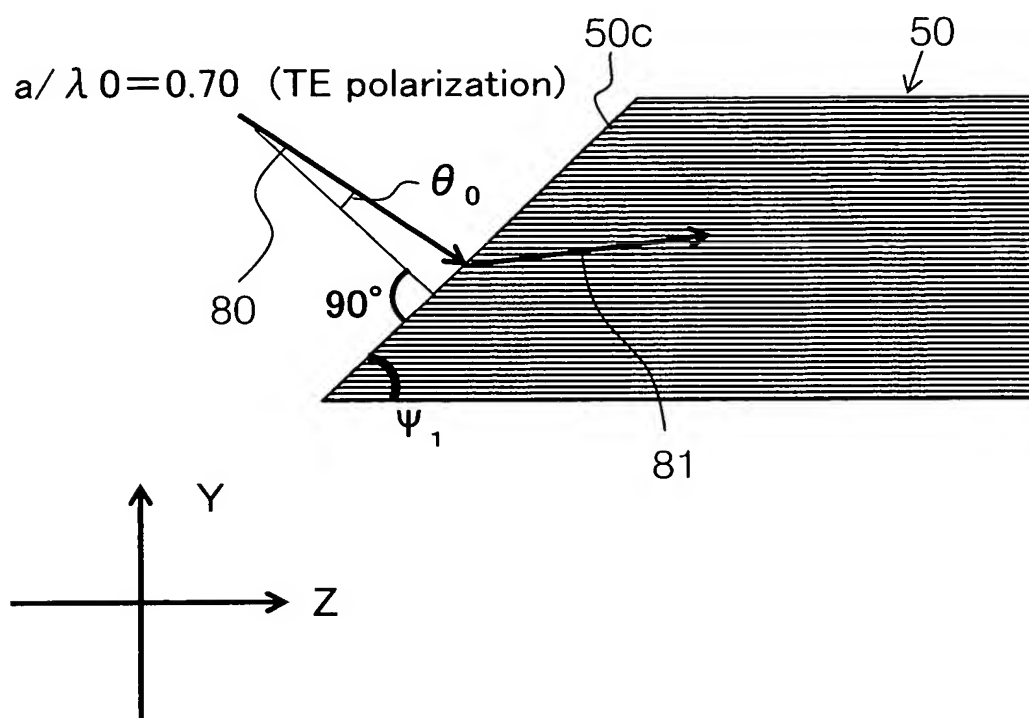


Fig. 19(b)

(Circle with radius of 0.70)

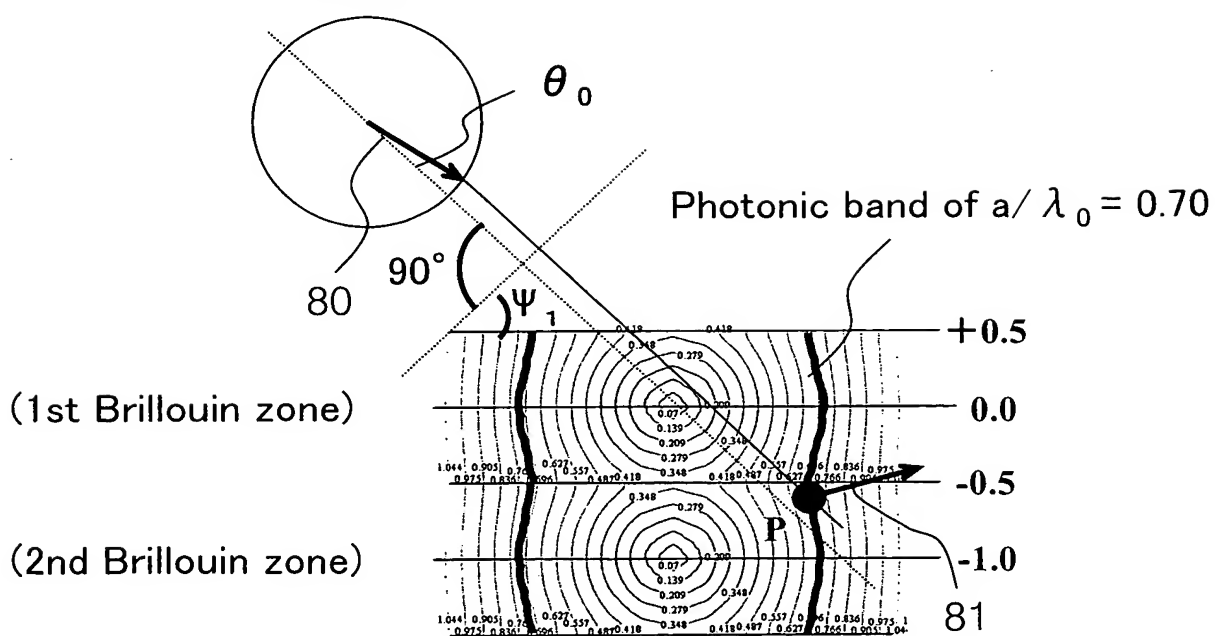


Fig.20

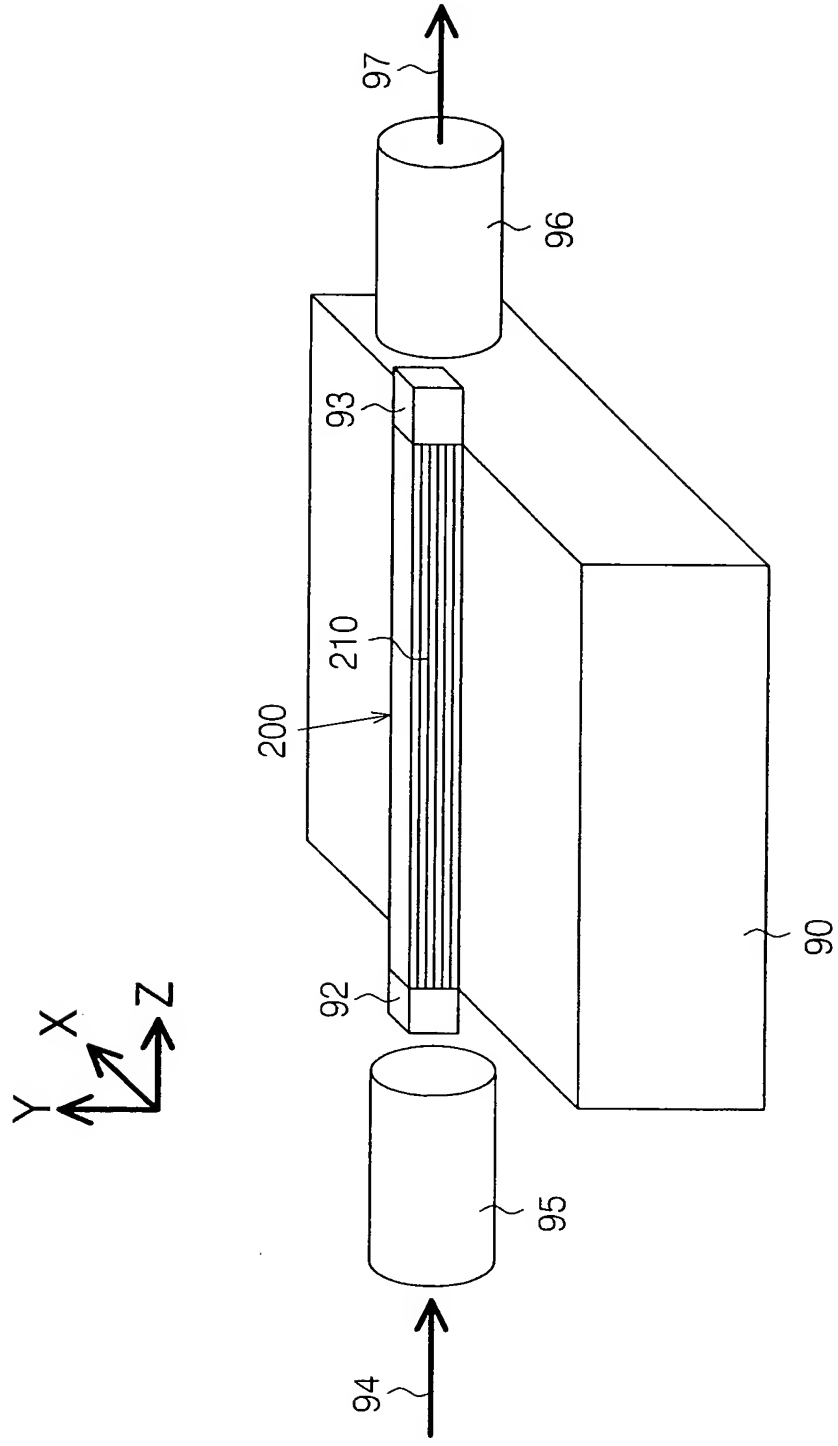


Fig.21

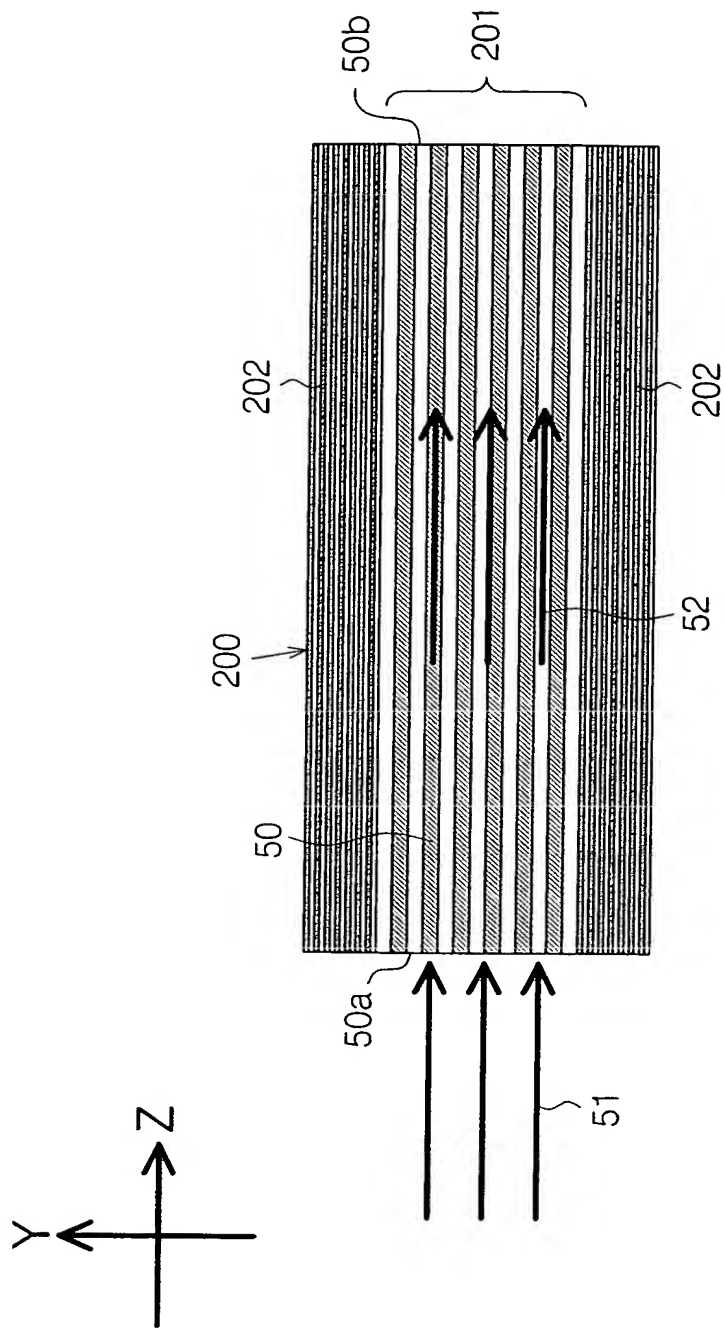


Fig. 22

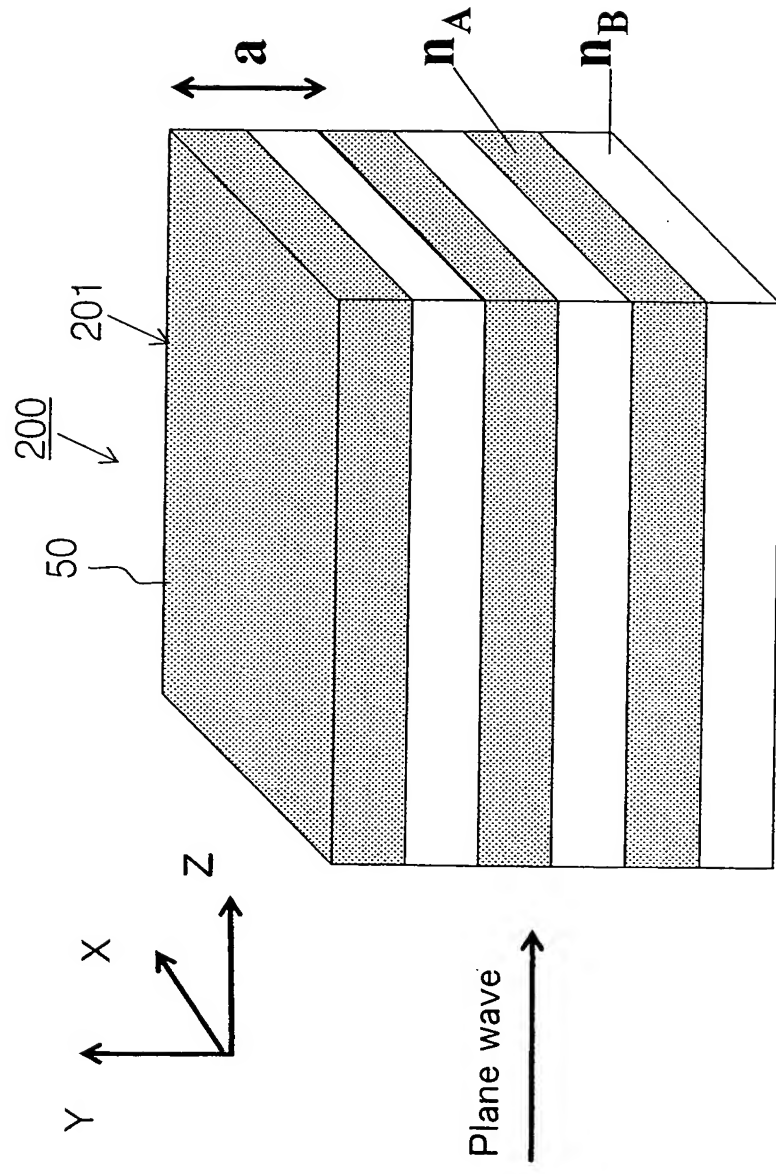


Fig. 23

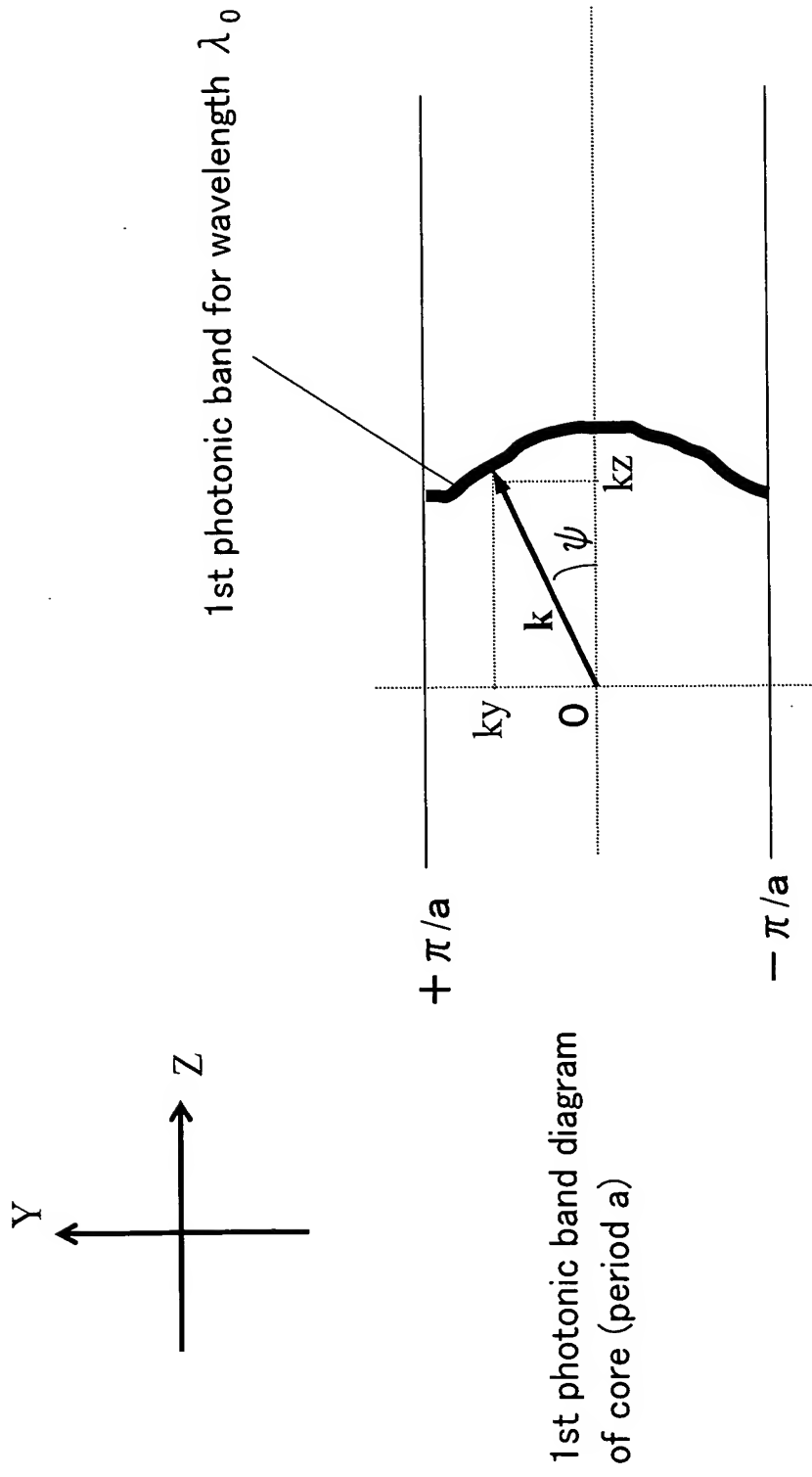


Fig. 24

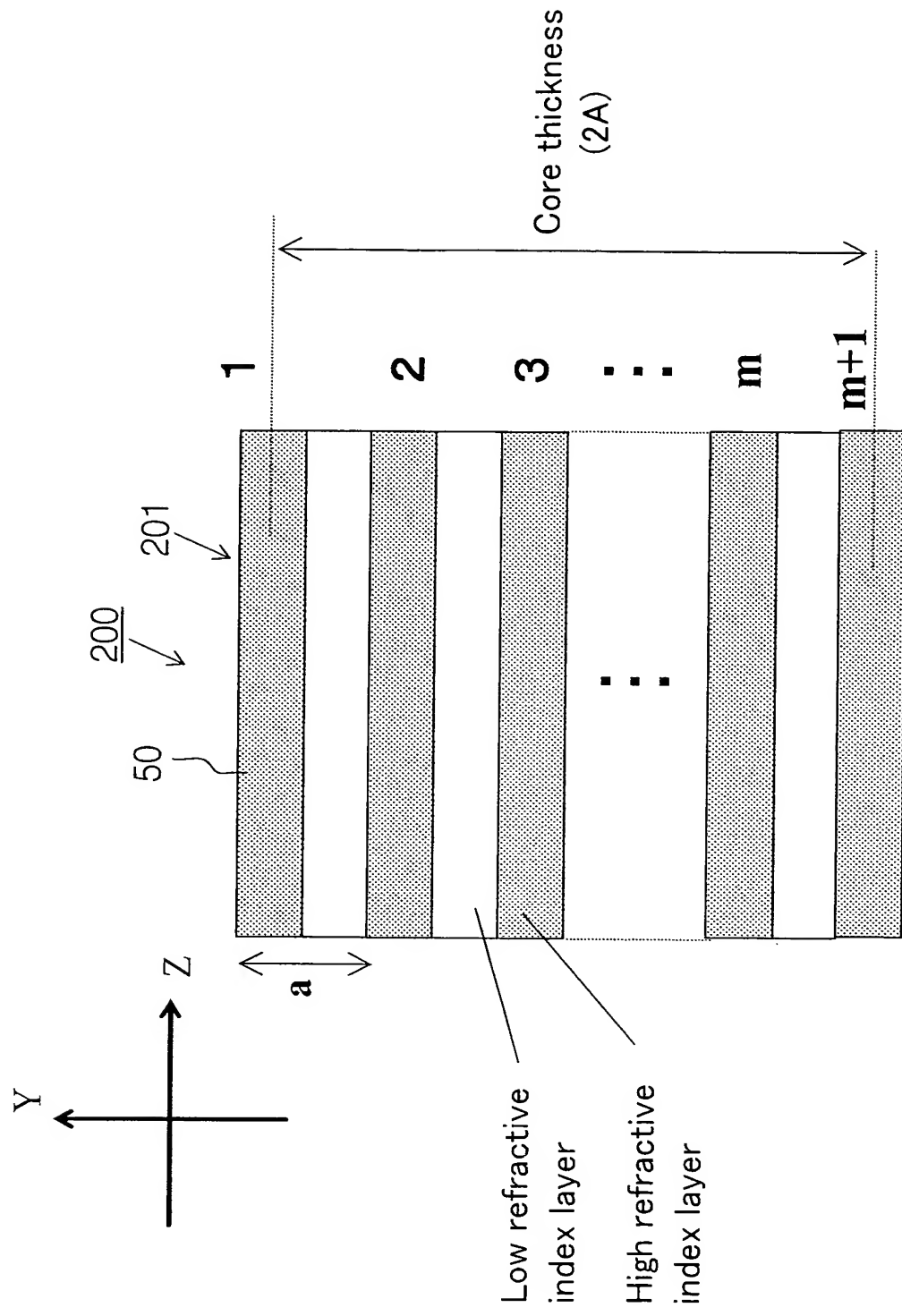


Fig. 25

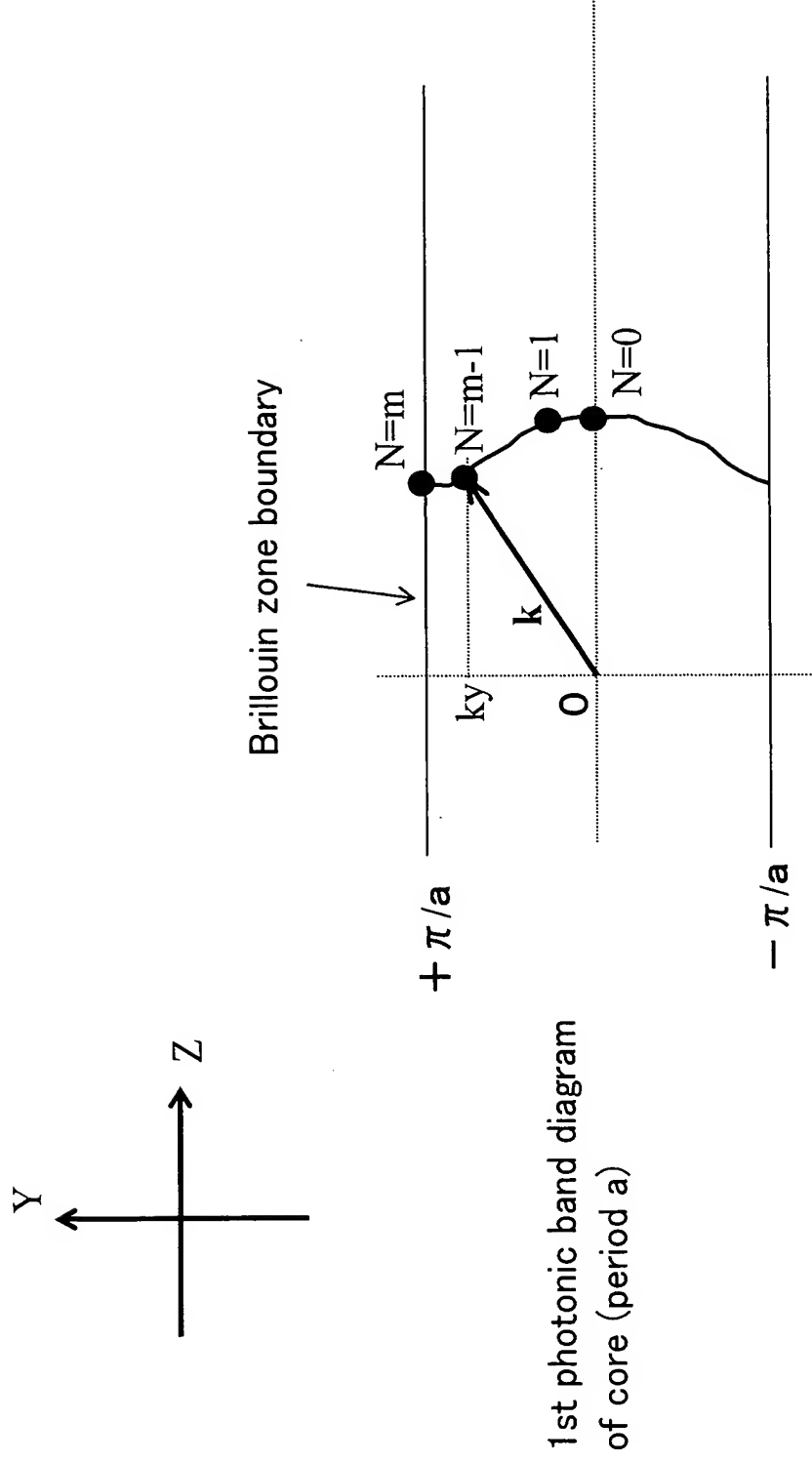


Fig. 26

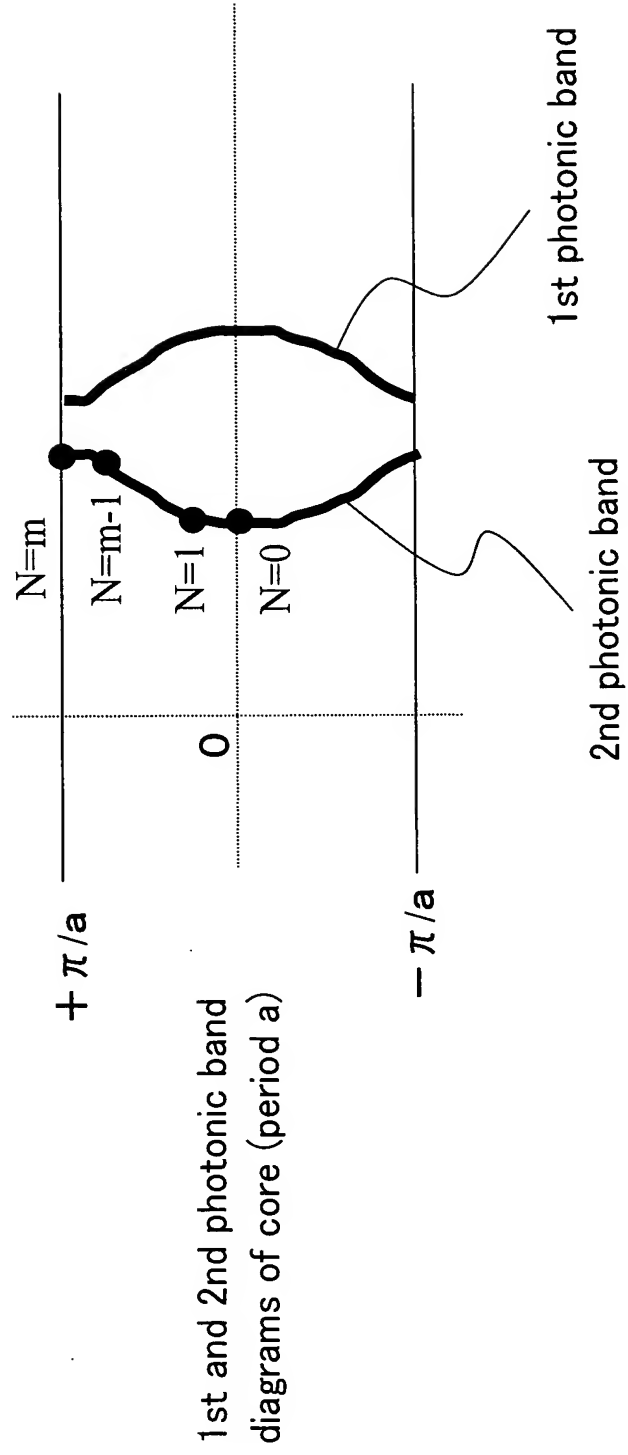


Fig. 27

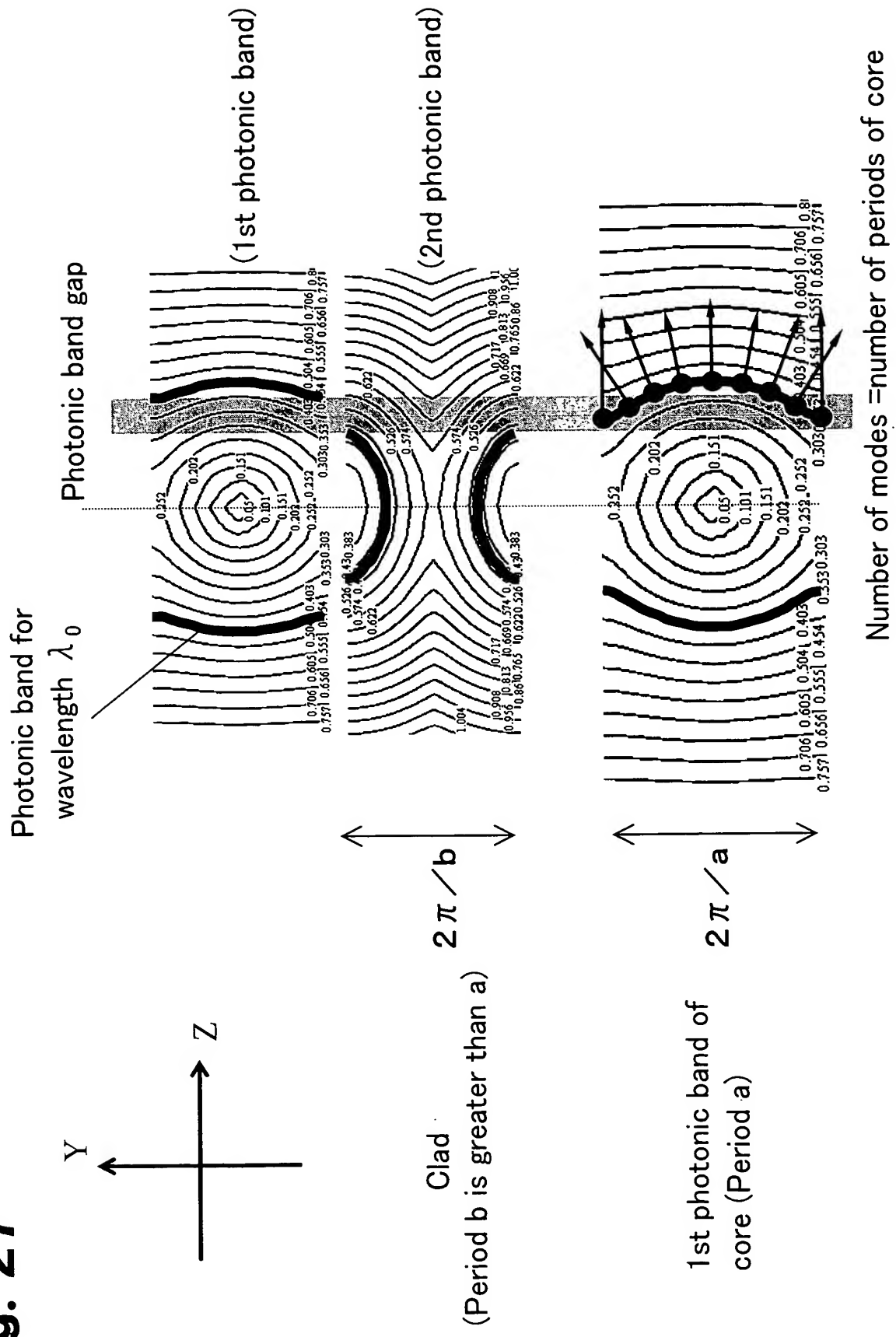


Fig. 28

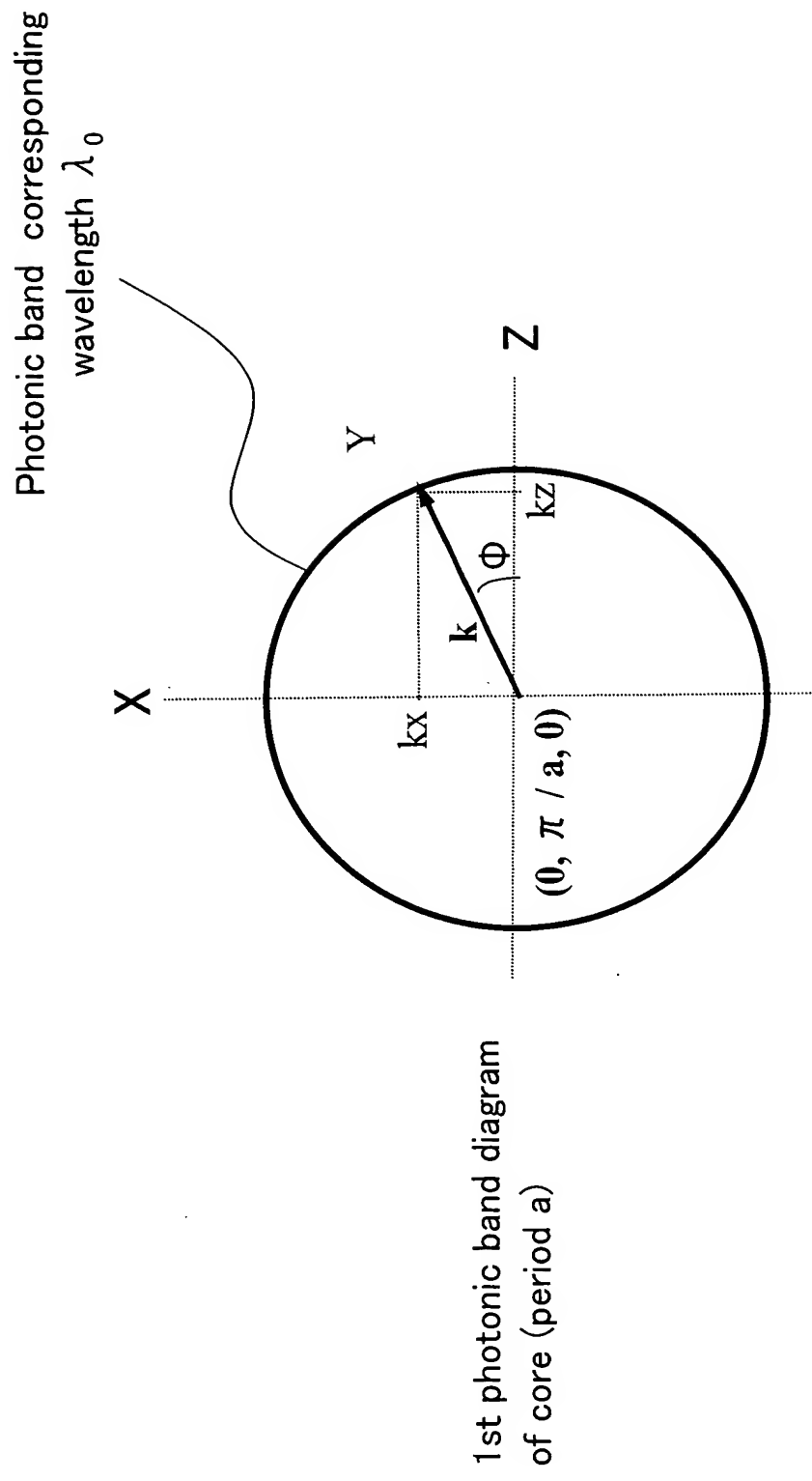


Fig. 29

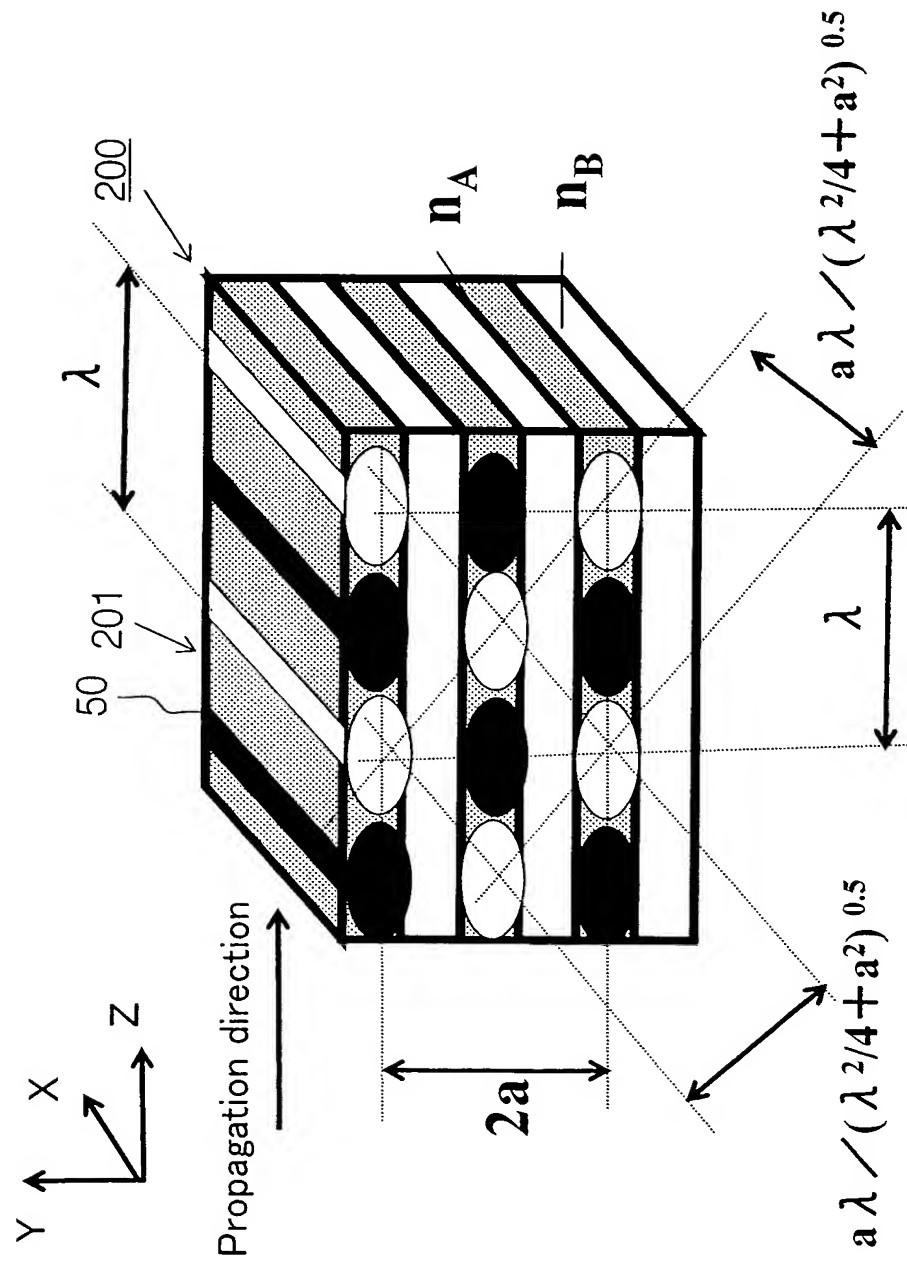


Fig. 30

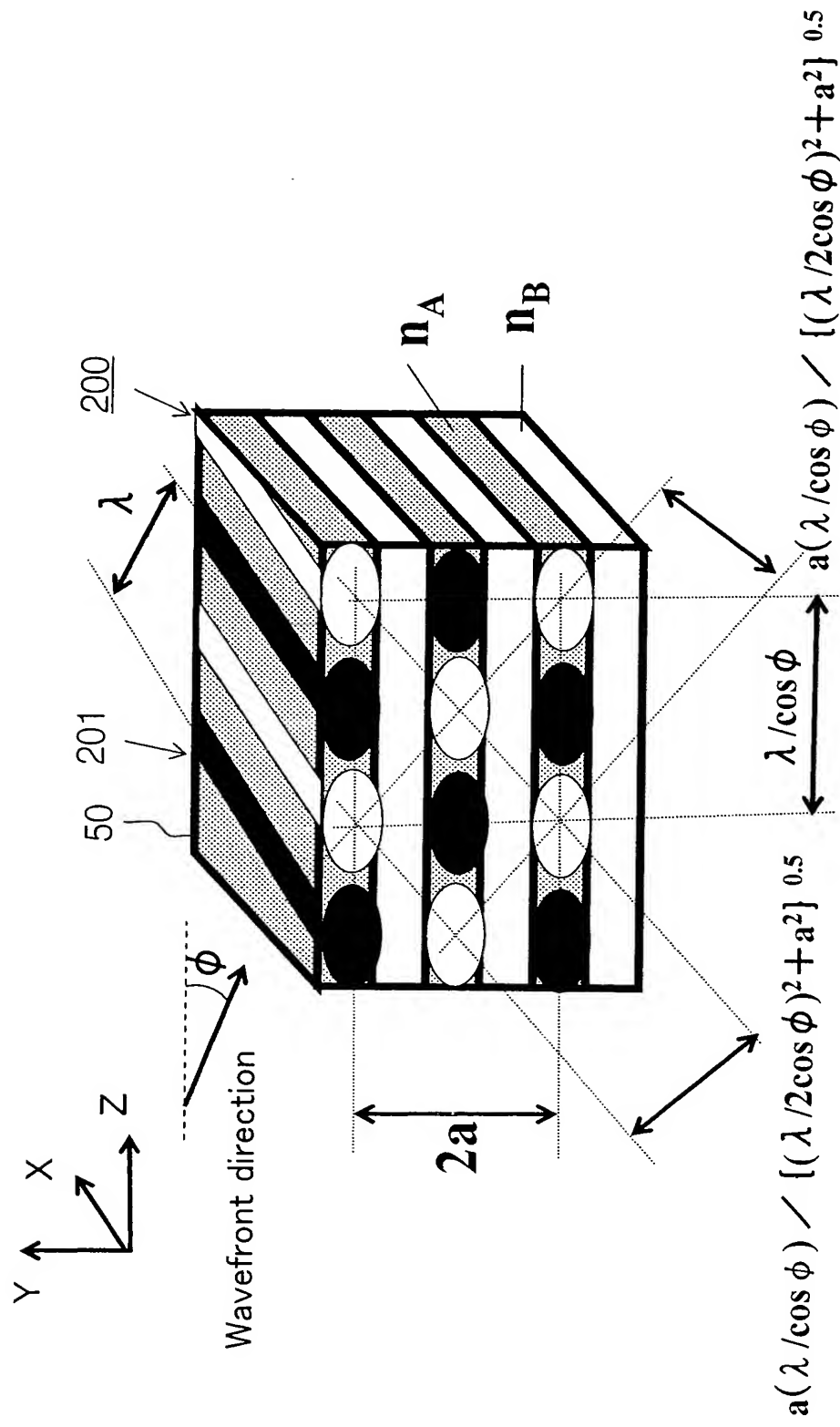


Fig. 31

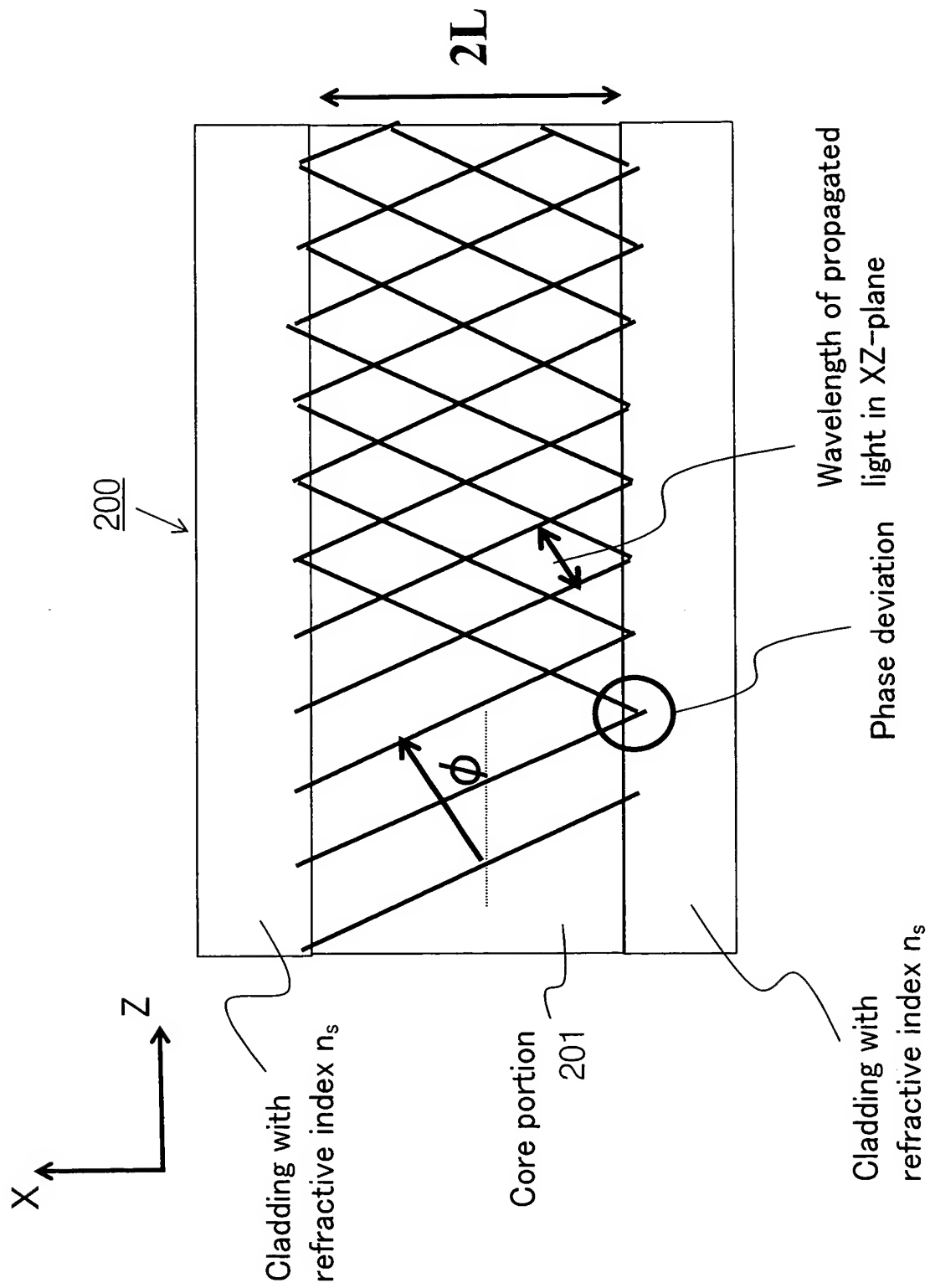


Fig. 32

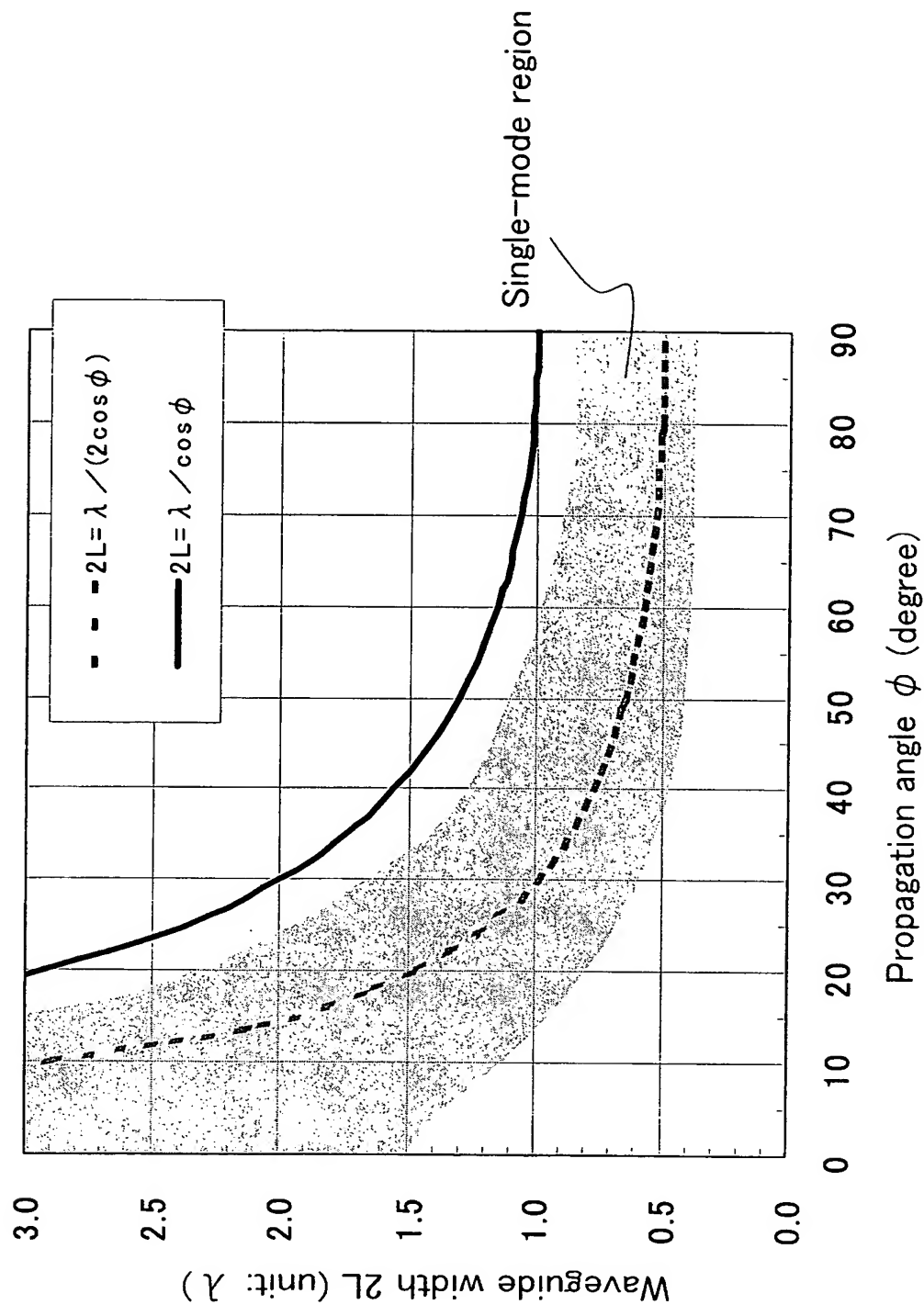


Fig. 33

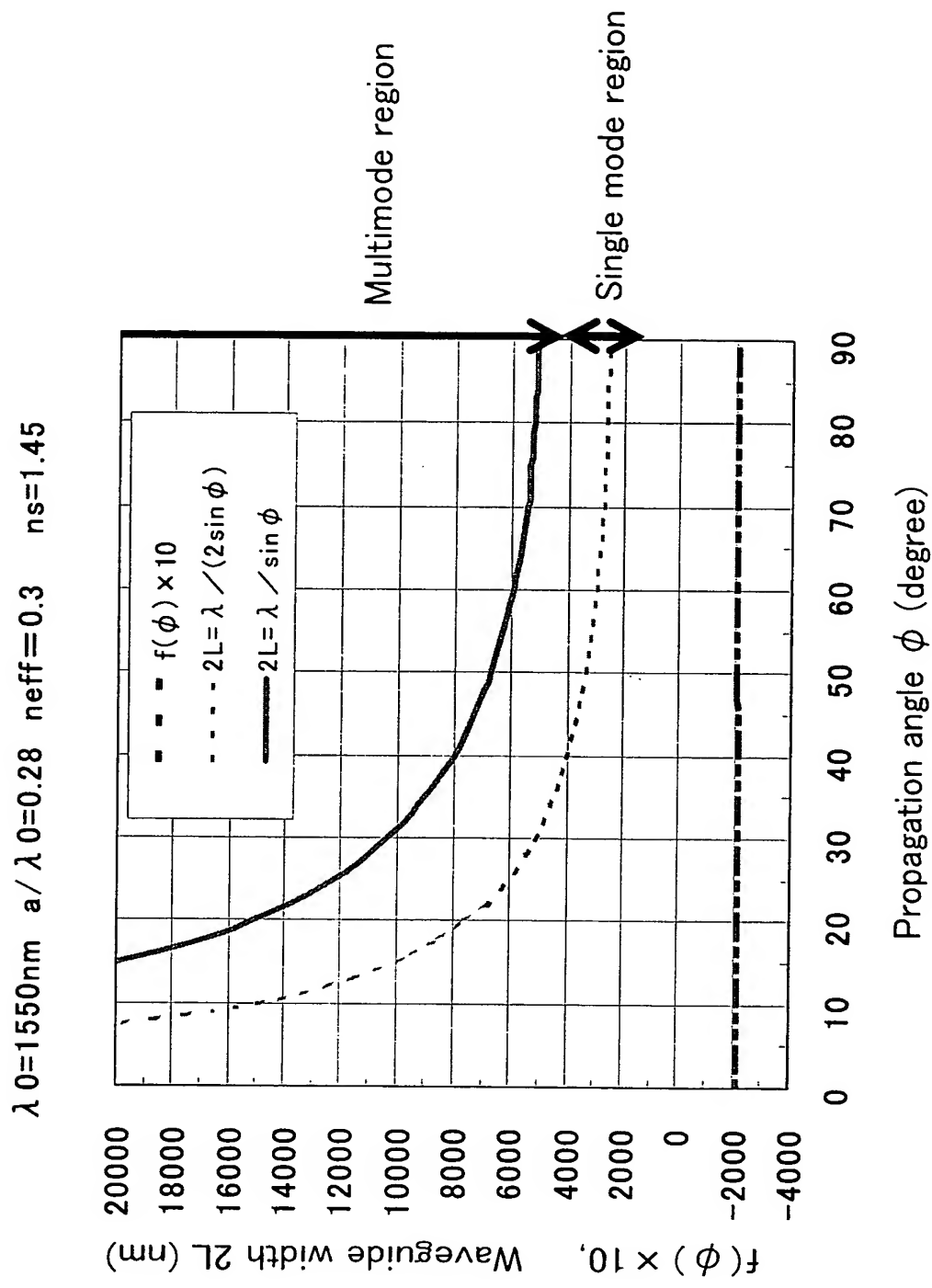


Fig. 34

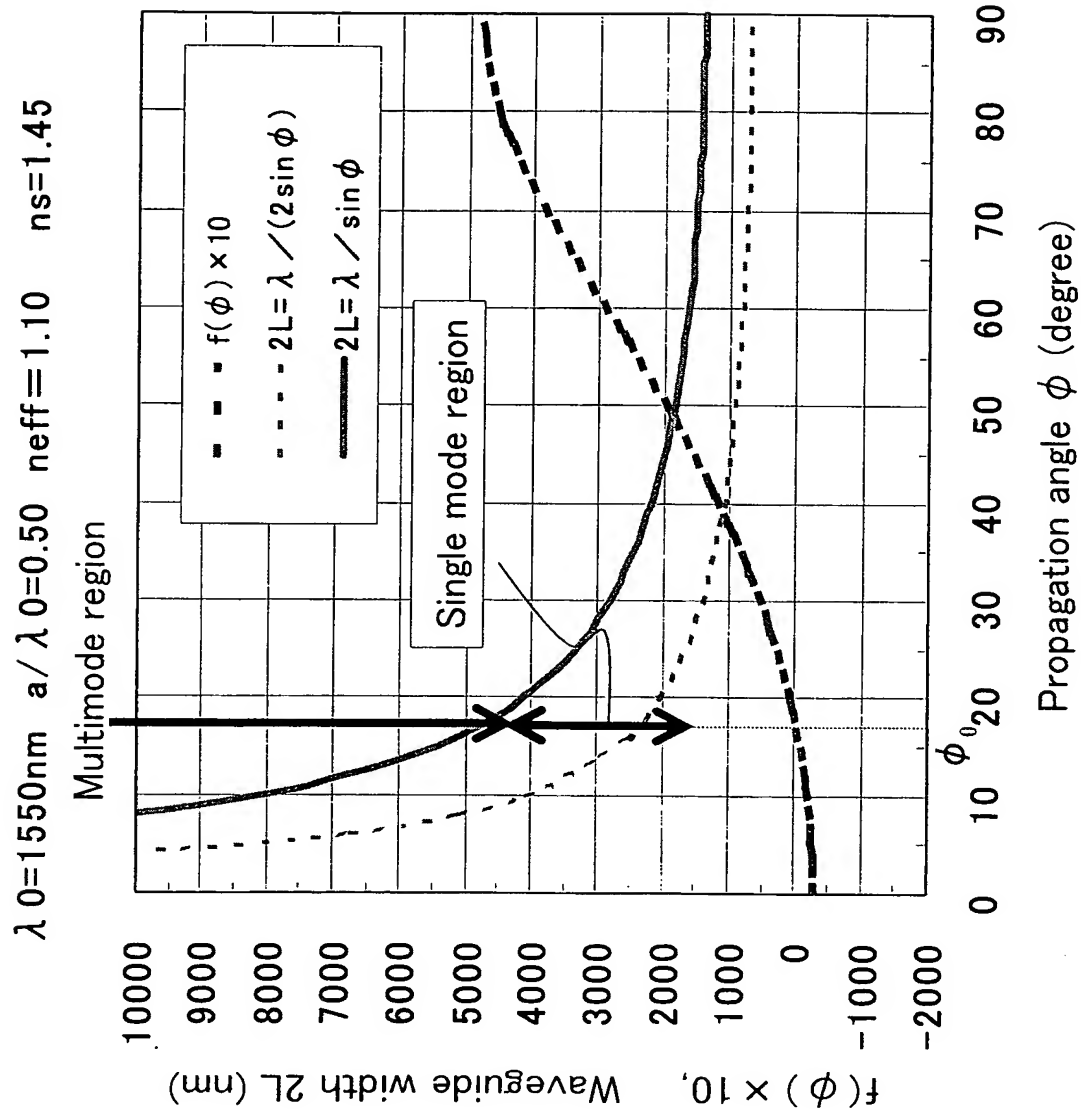


Fig. 35

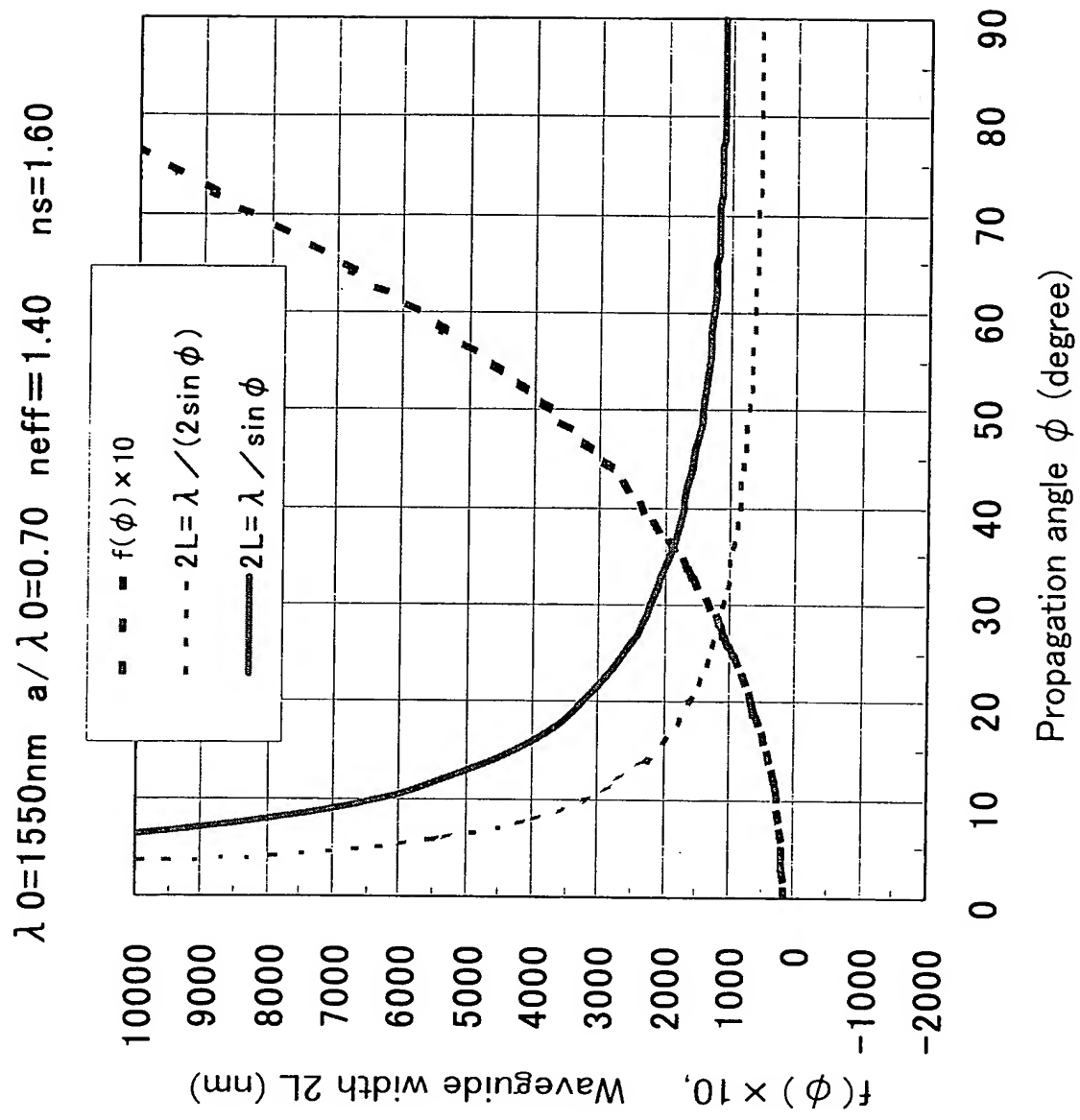


Fig. 36

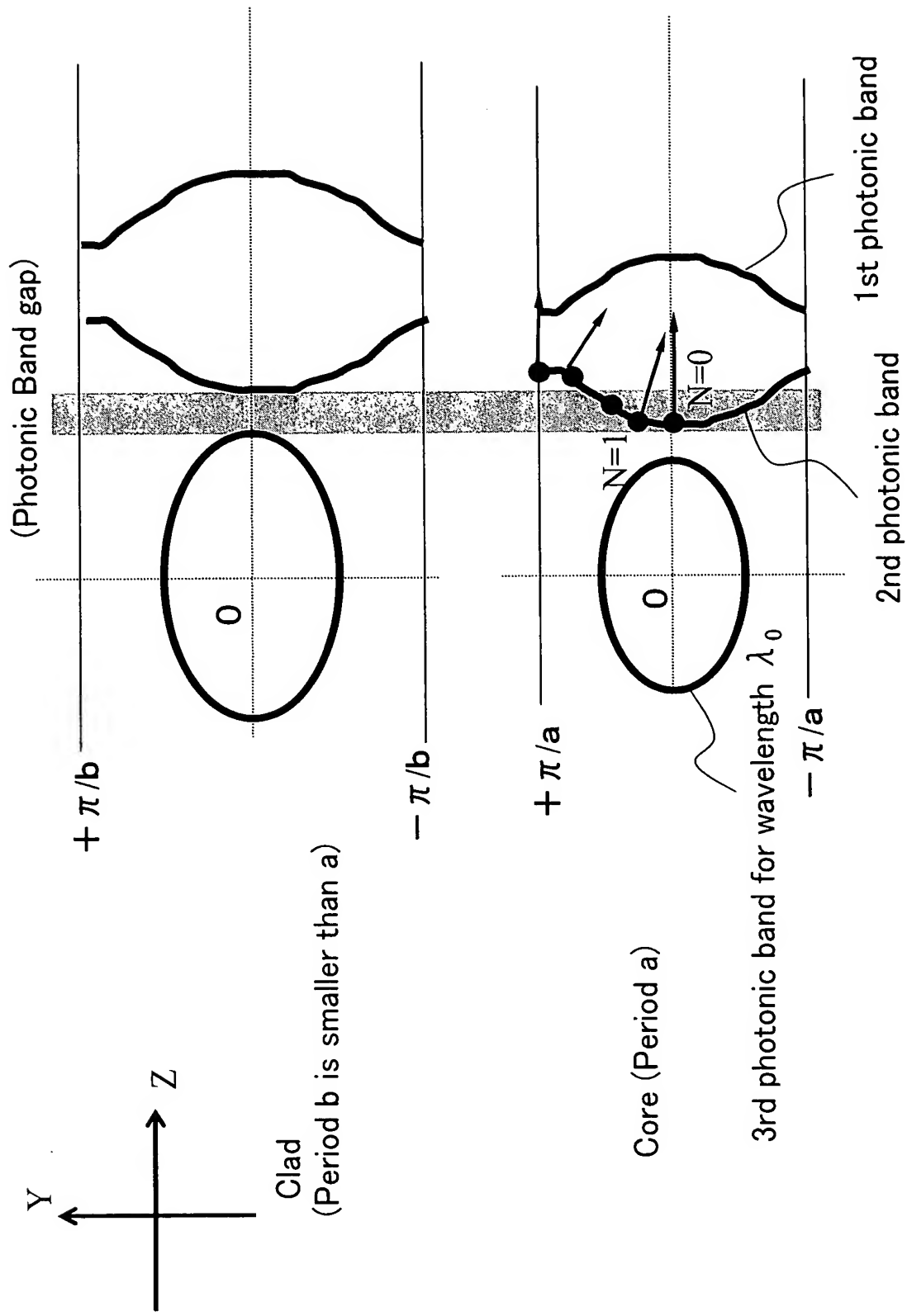


Fig. 37

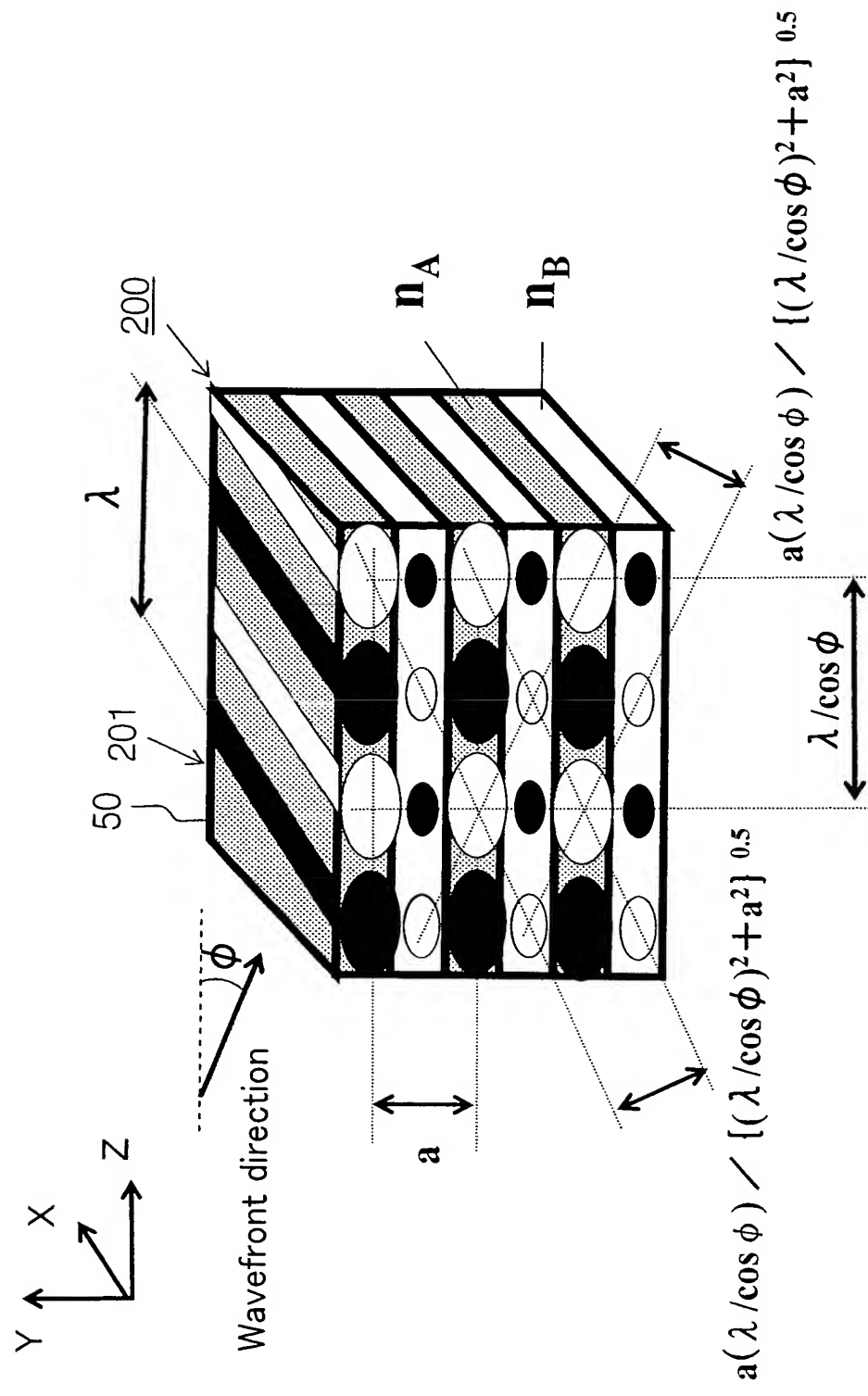


Fig. 38

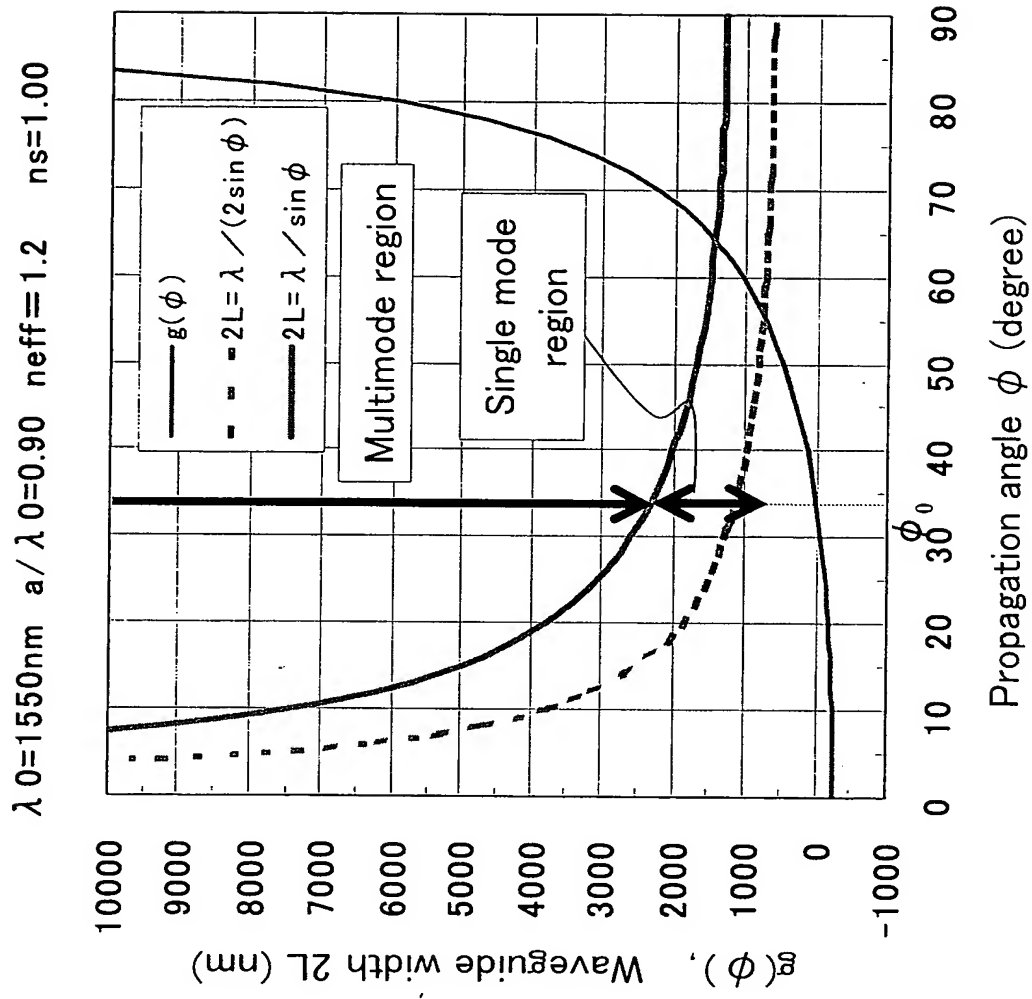


Fig. 39

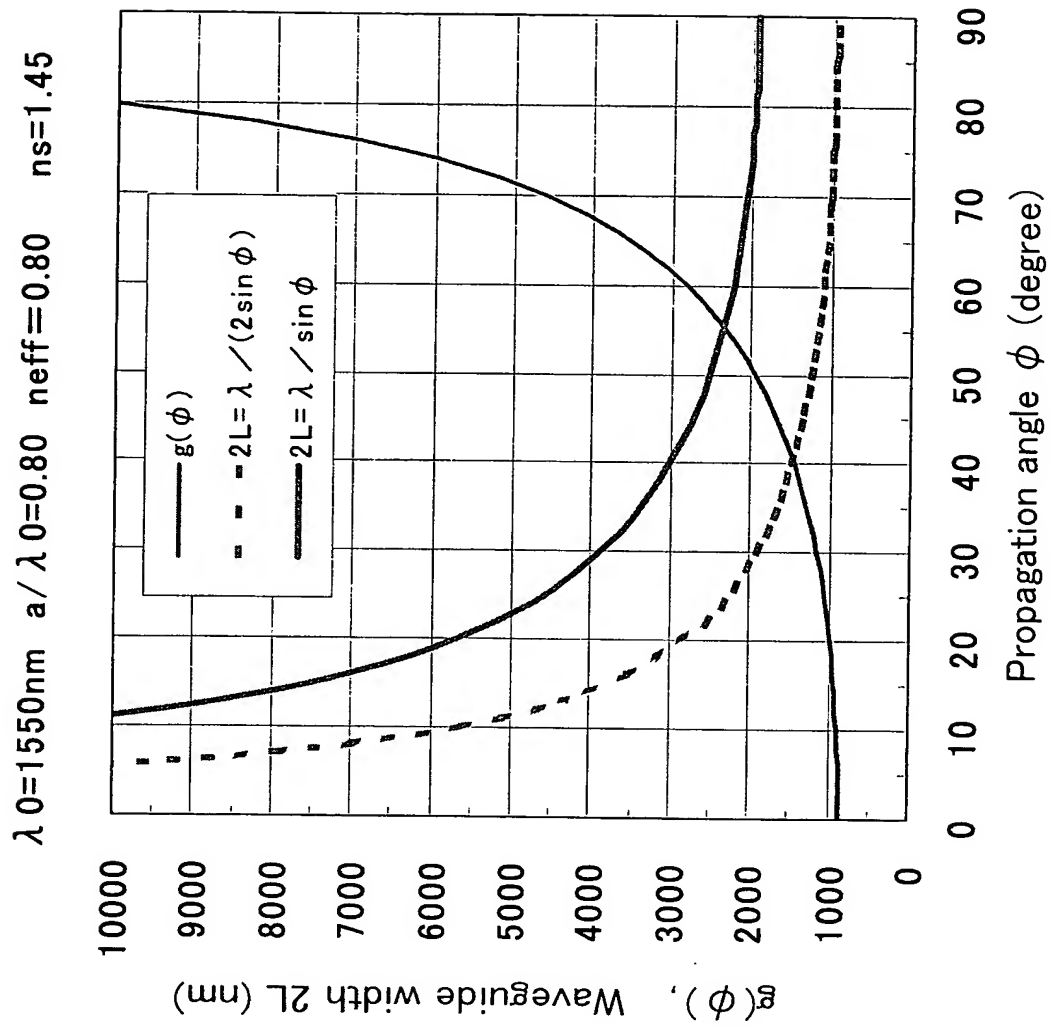


Fig. 40

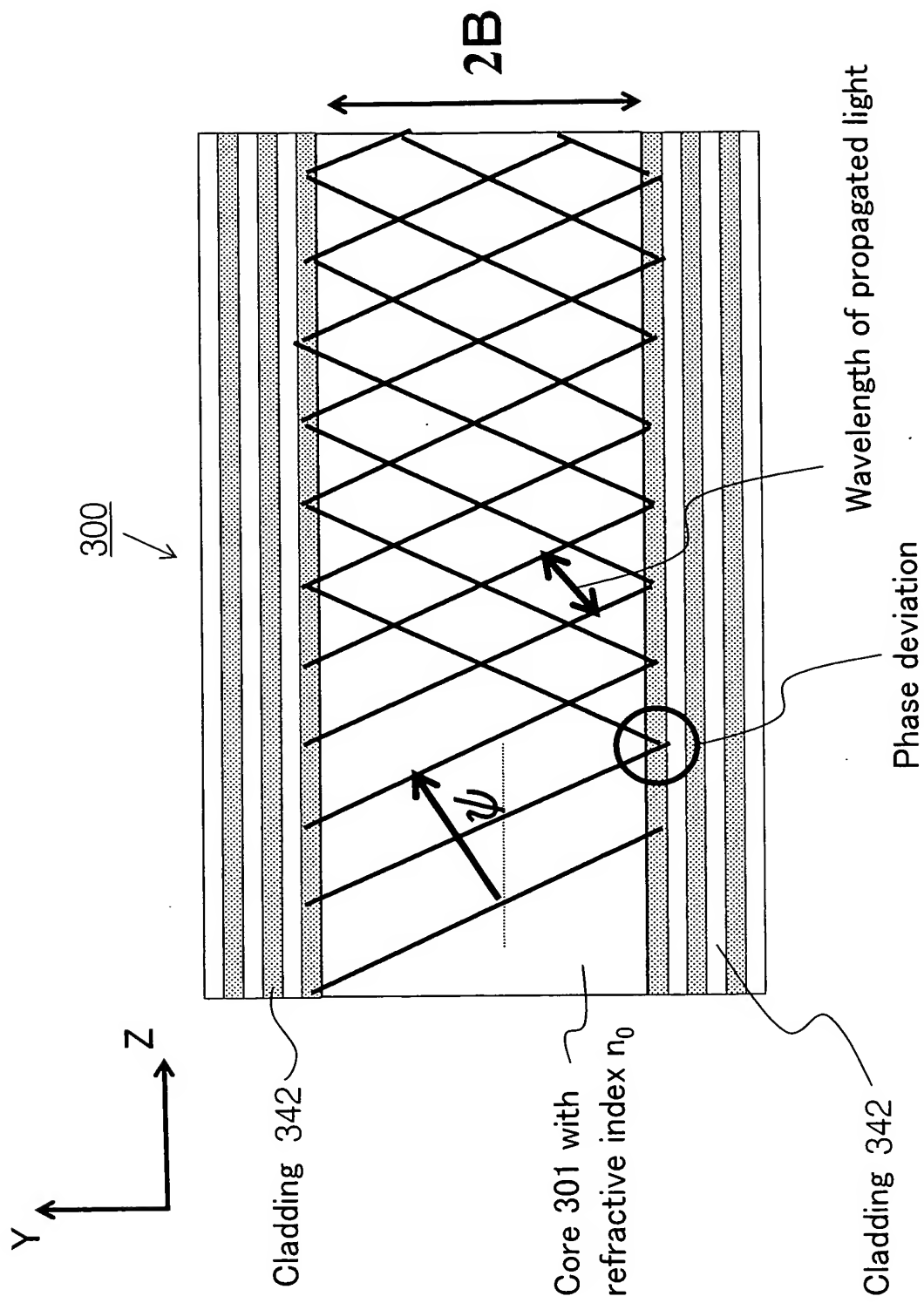


Fig. 41

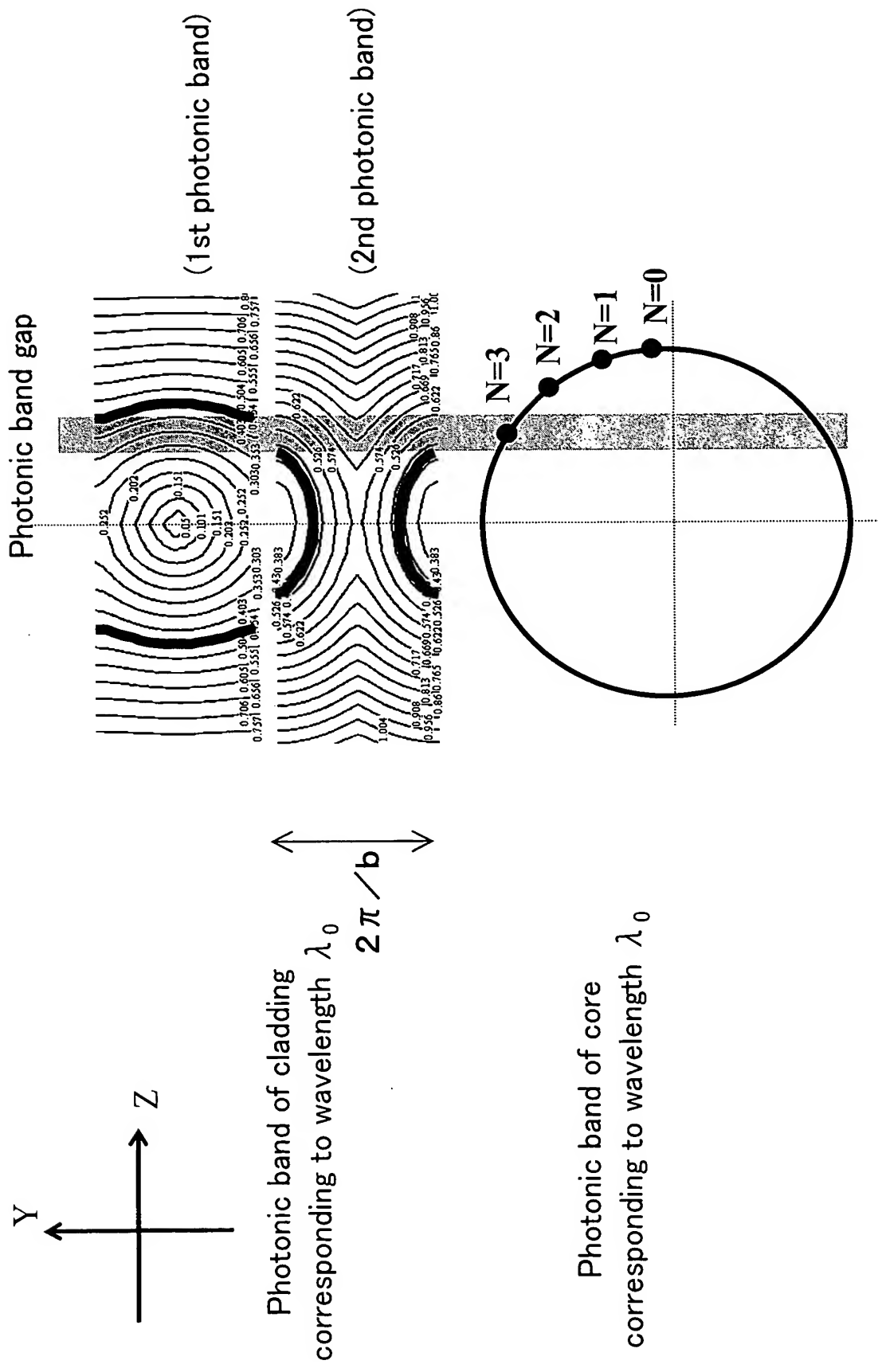


Fig. 42

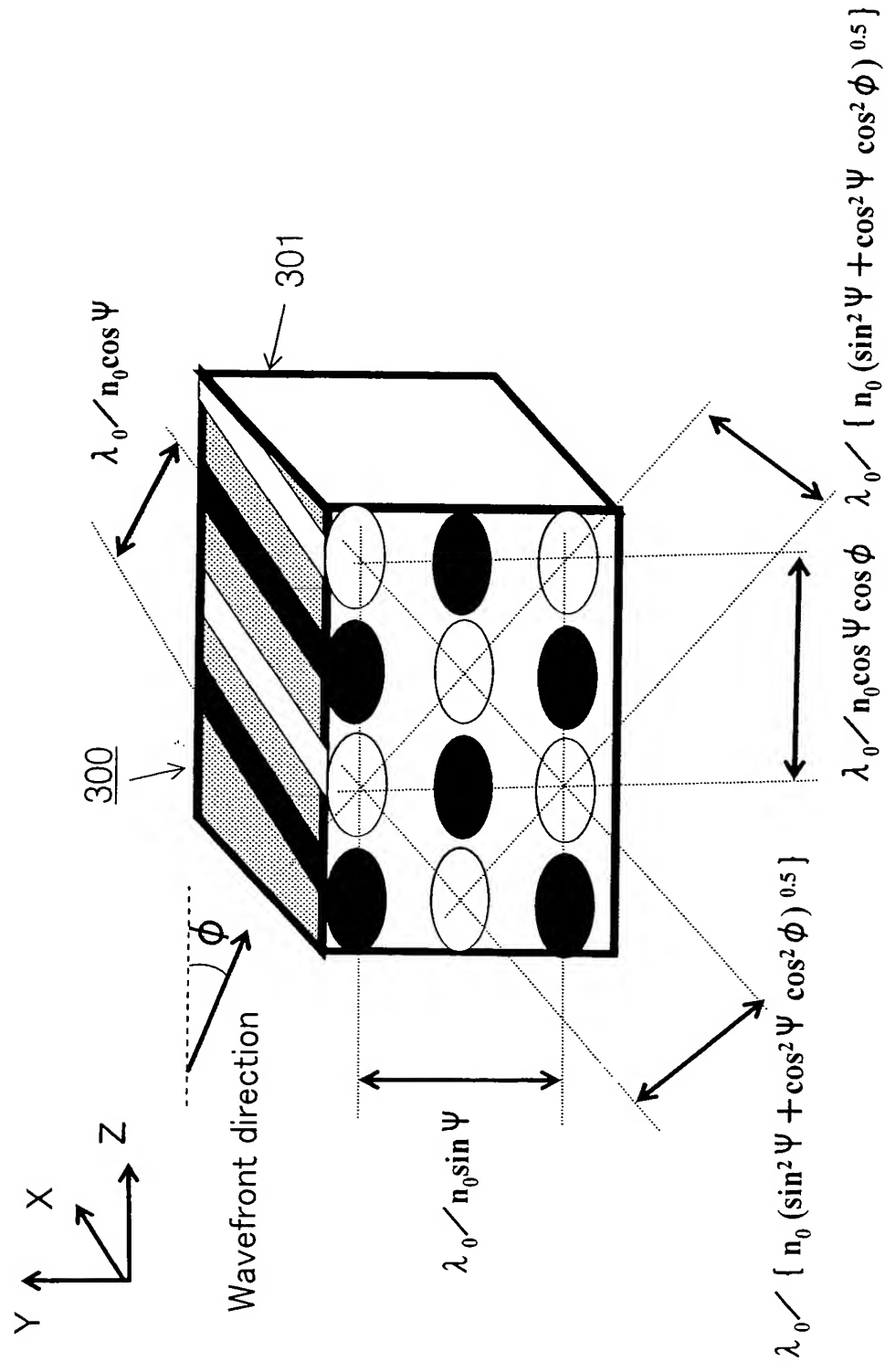


Fig. 43

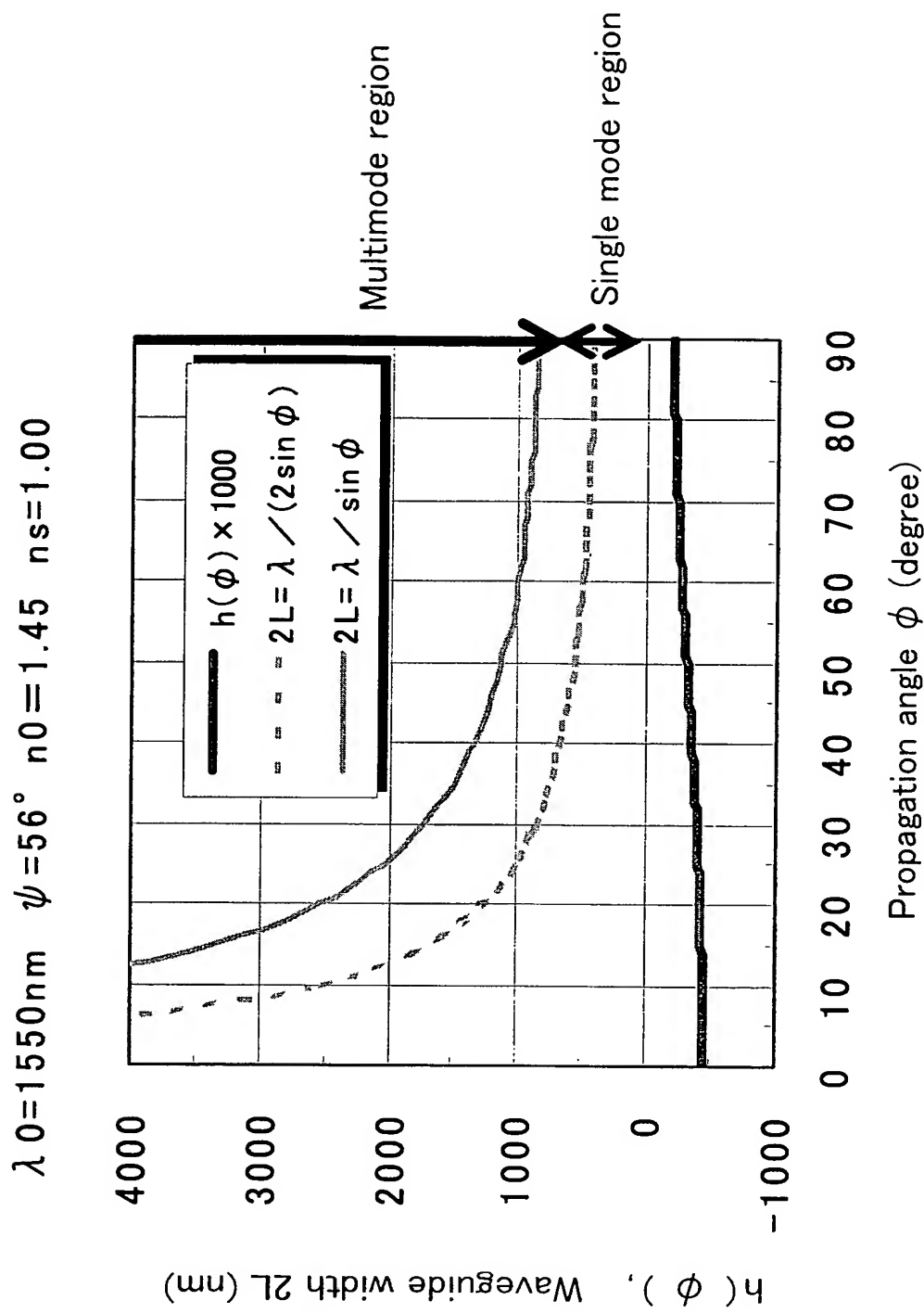


Fig. 44

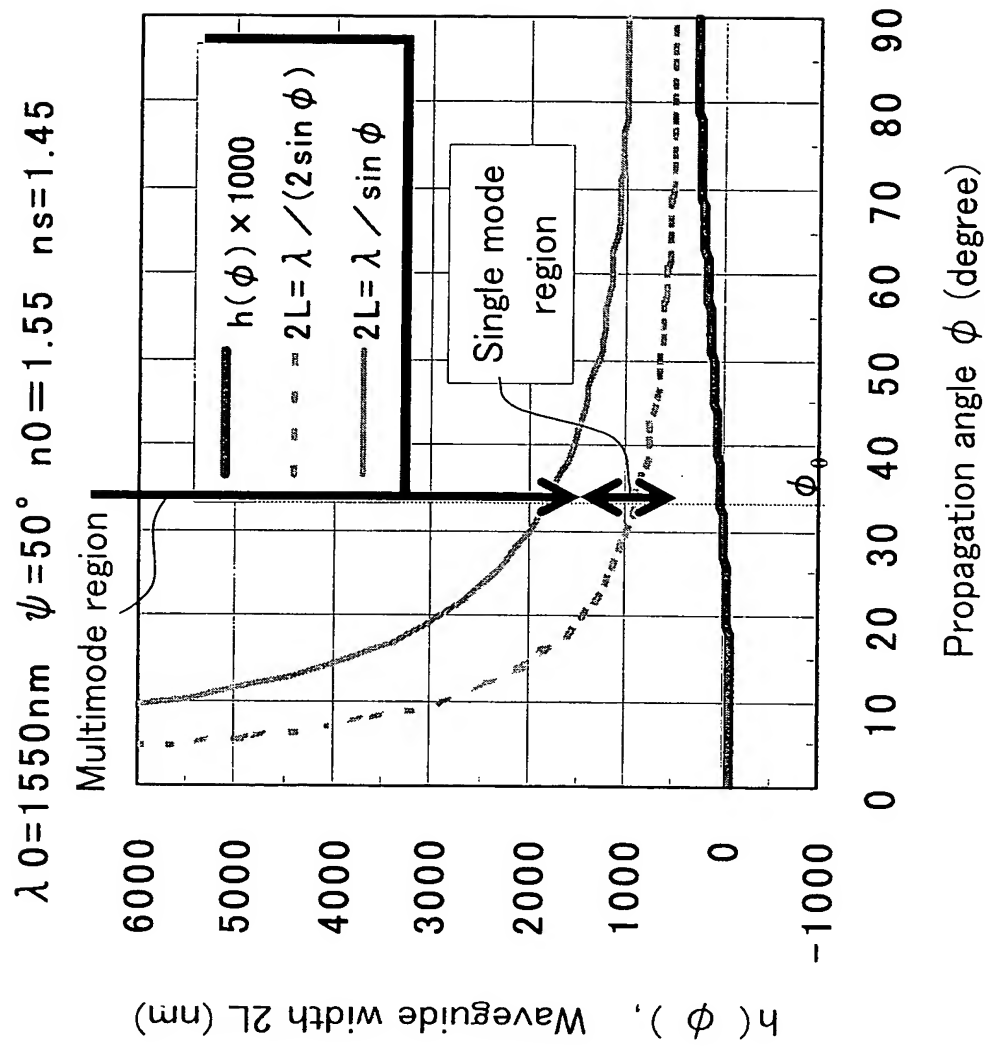


Fig. 45

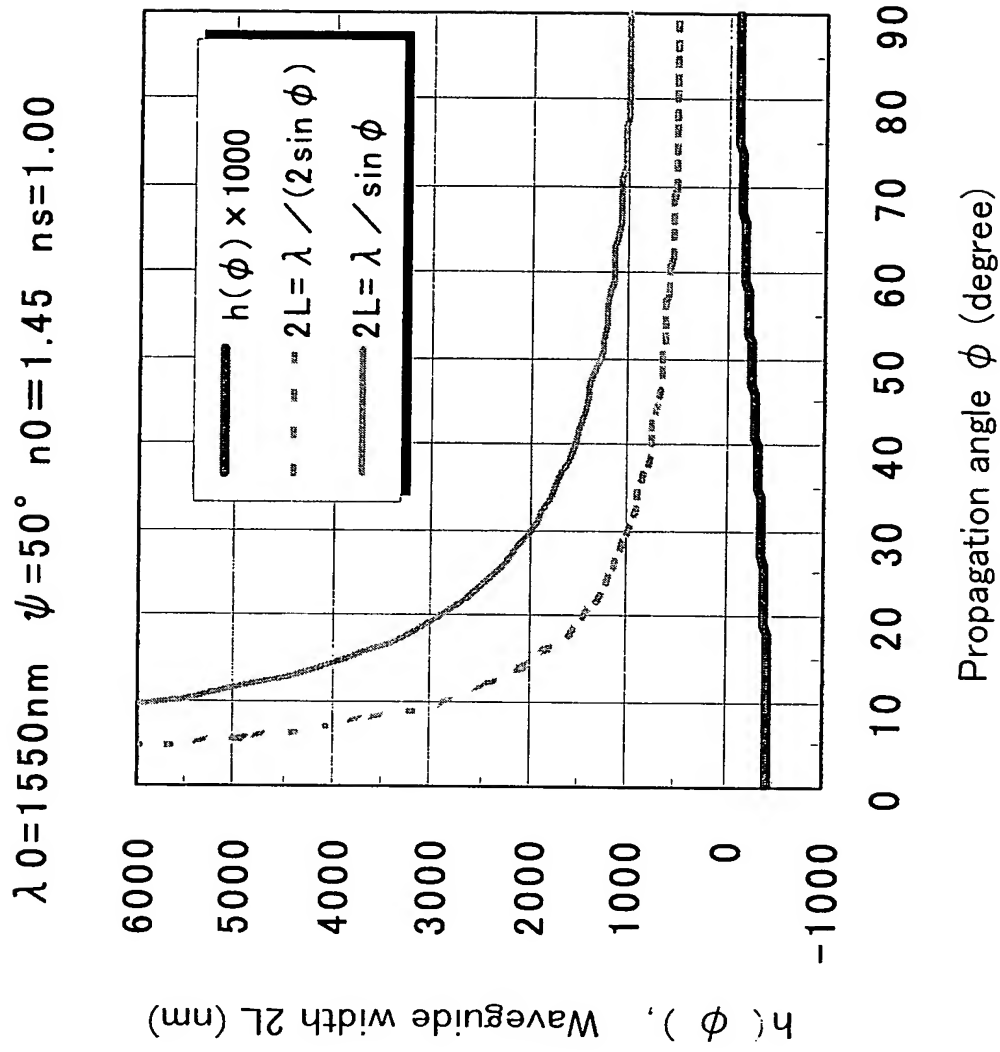


Fig.46

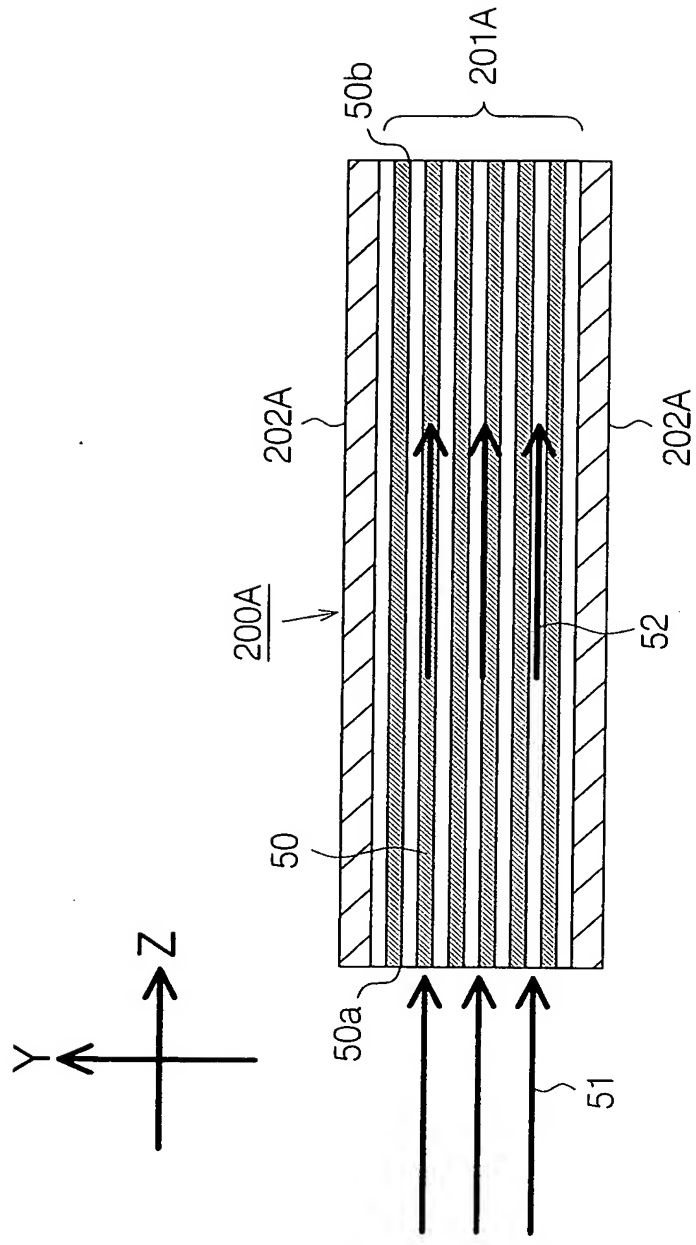


Fig.47

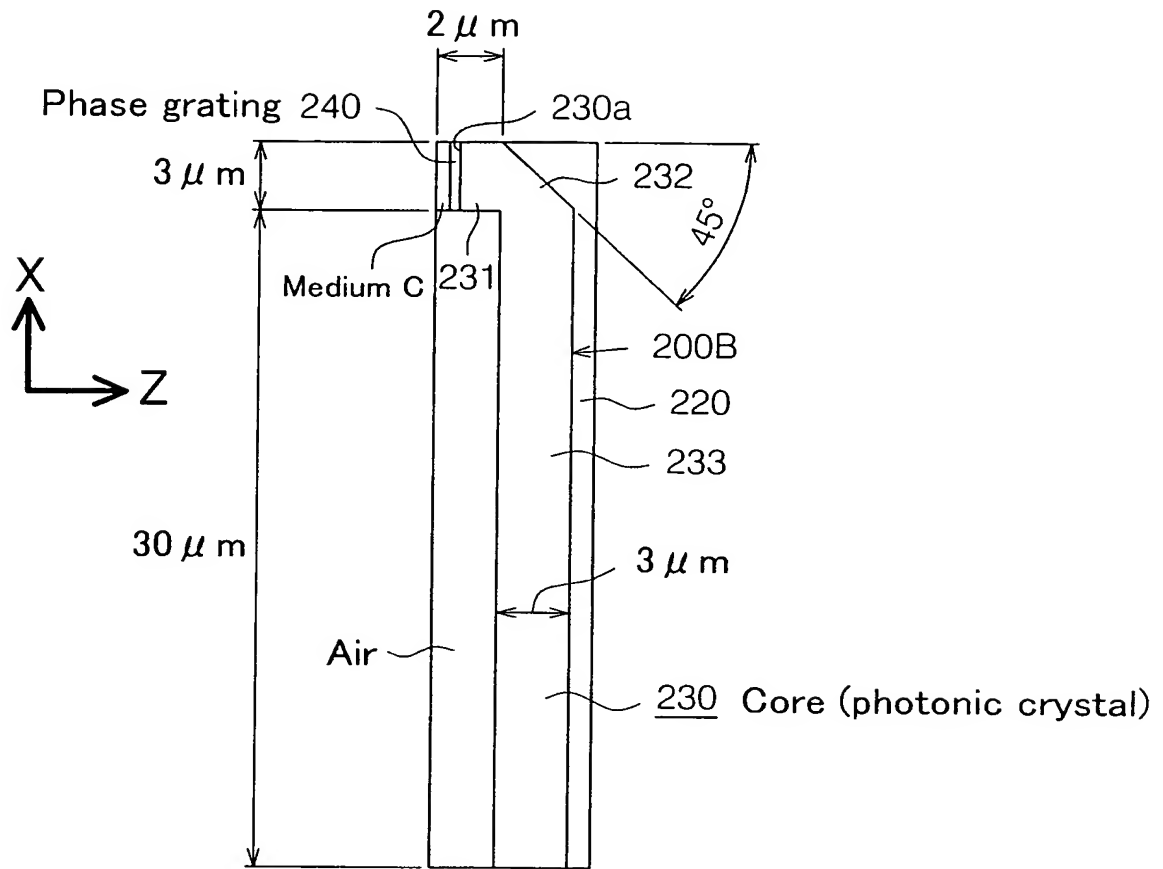


Fig.48

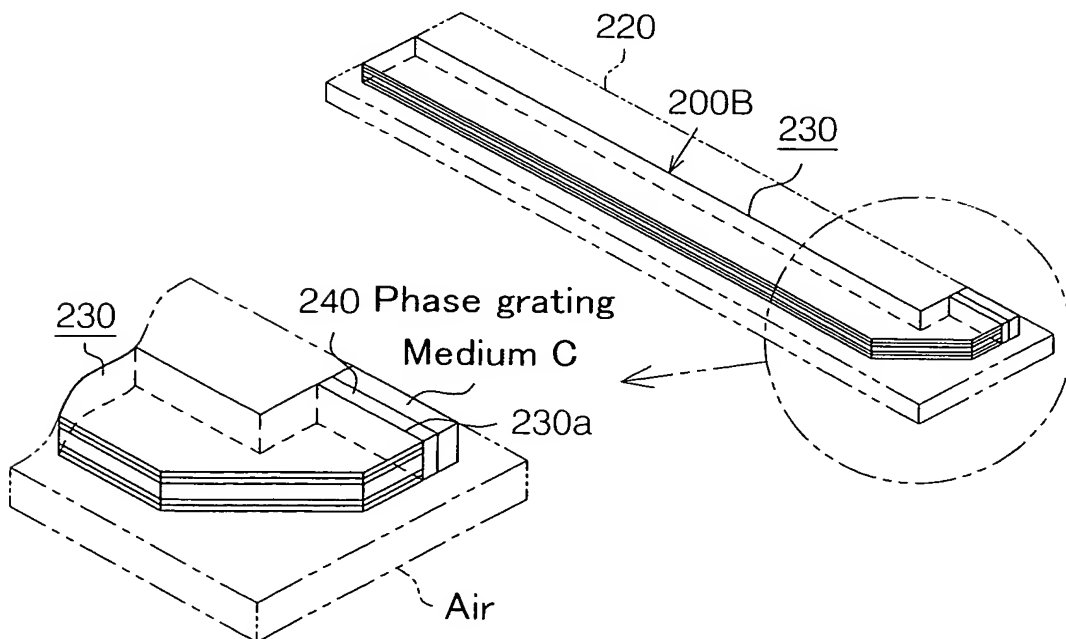


Fig.49

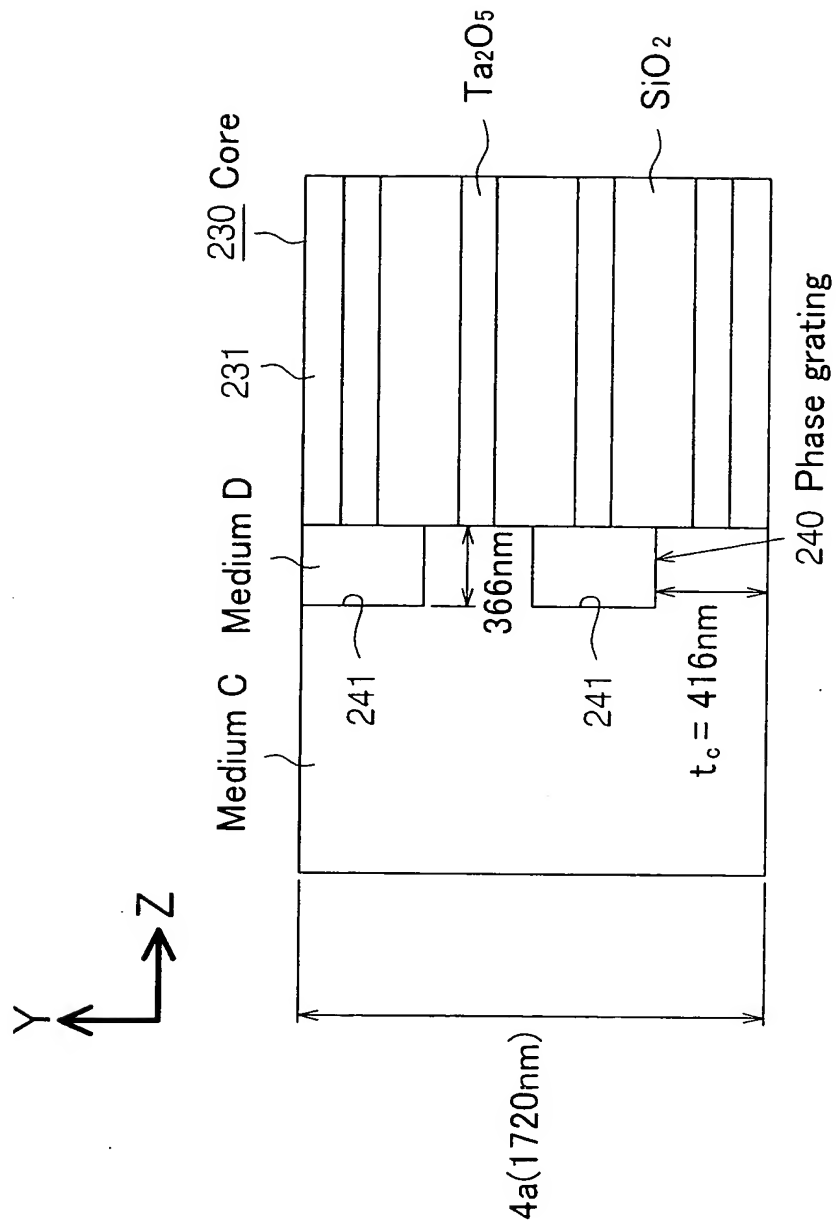


Fig. 50

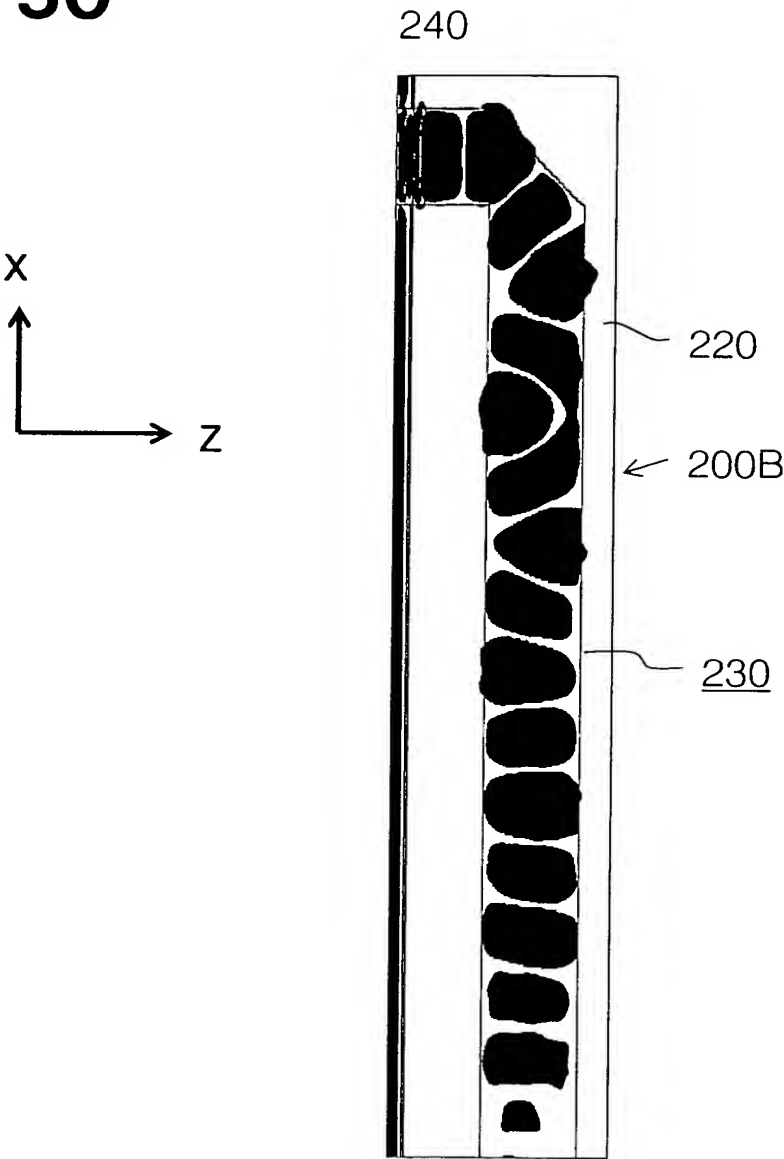


Fig. 52

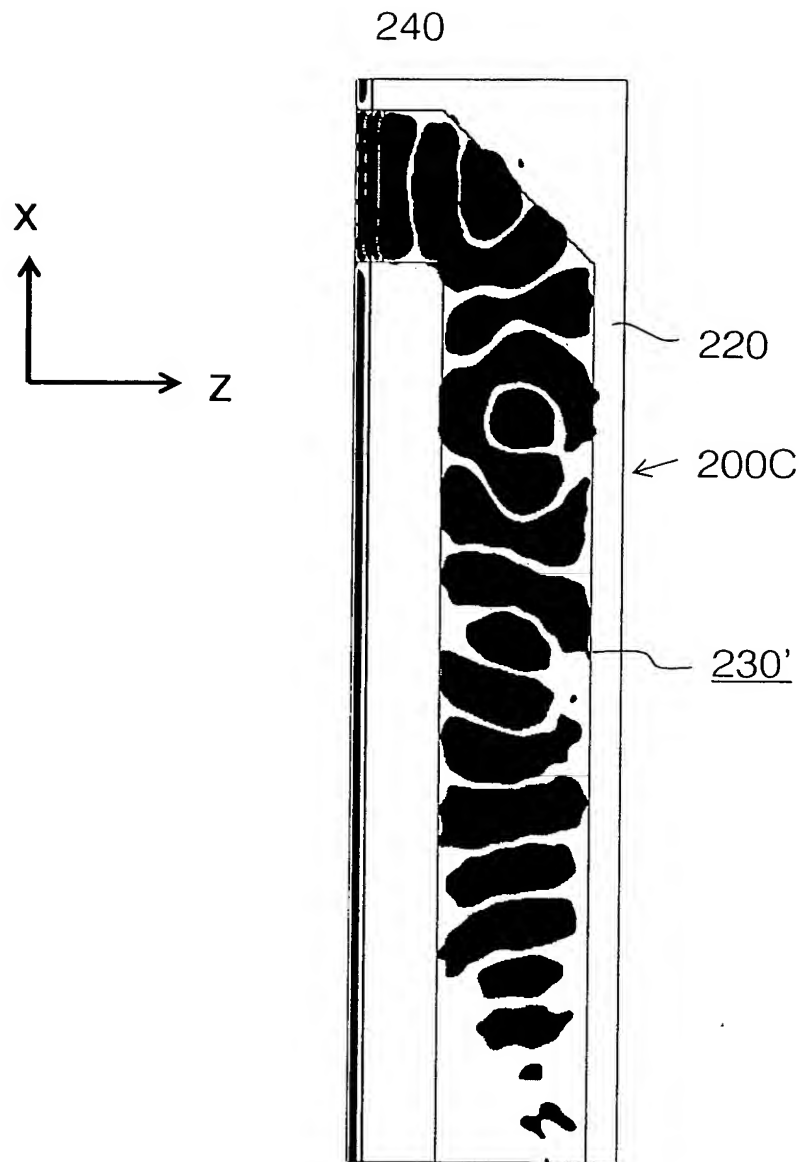


Fig.53

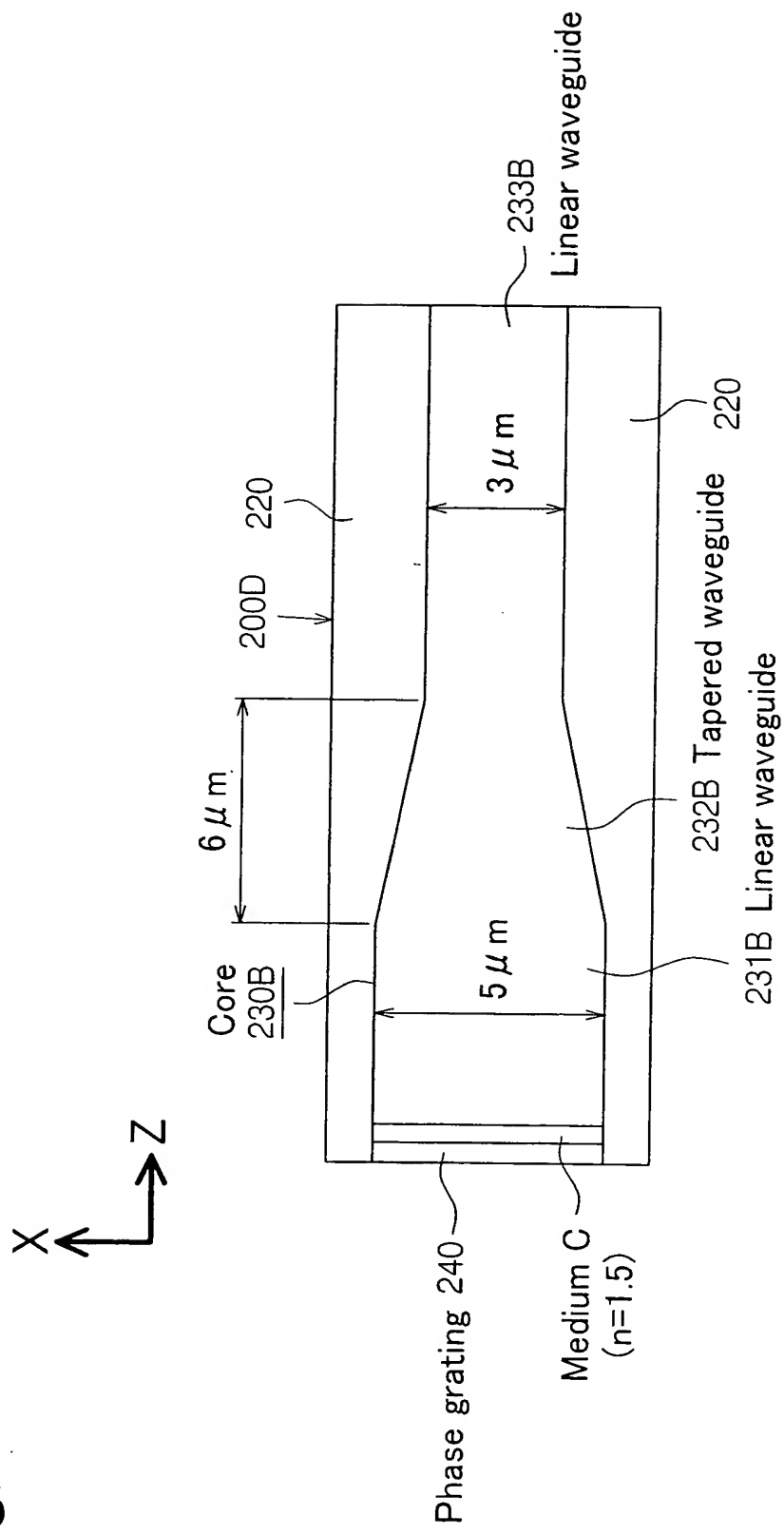


Fig. 54

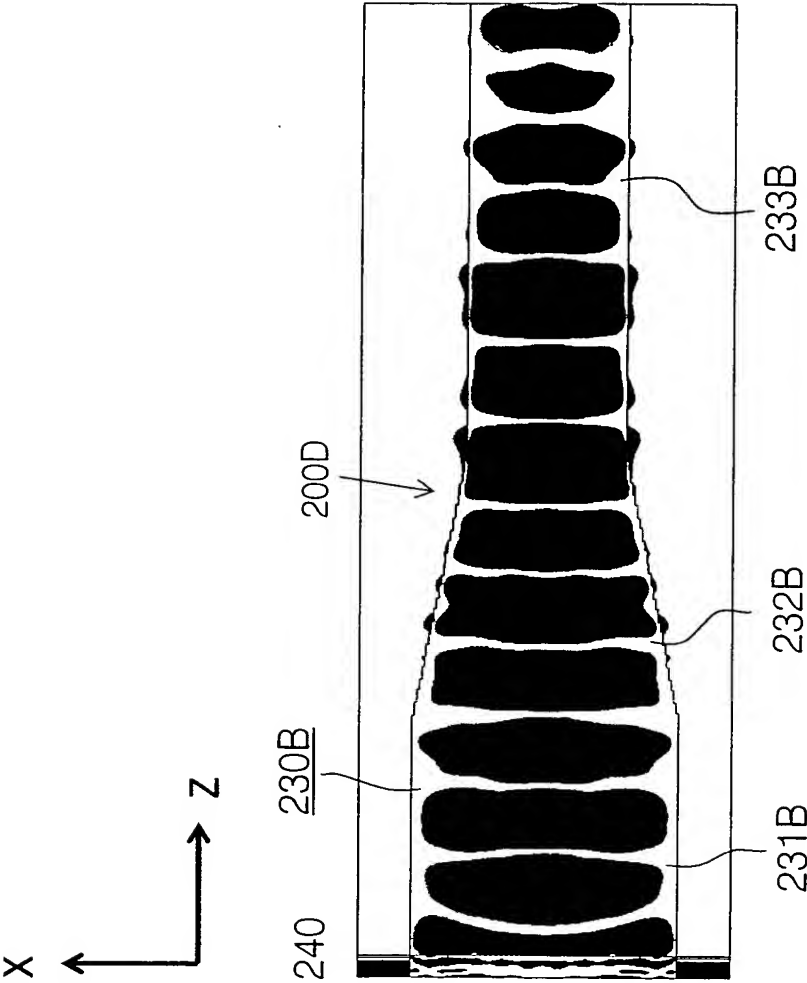


Fig.55

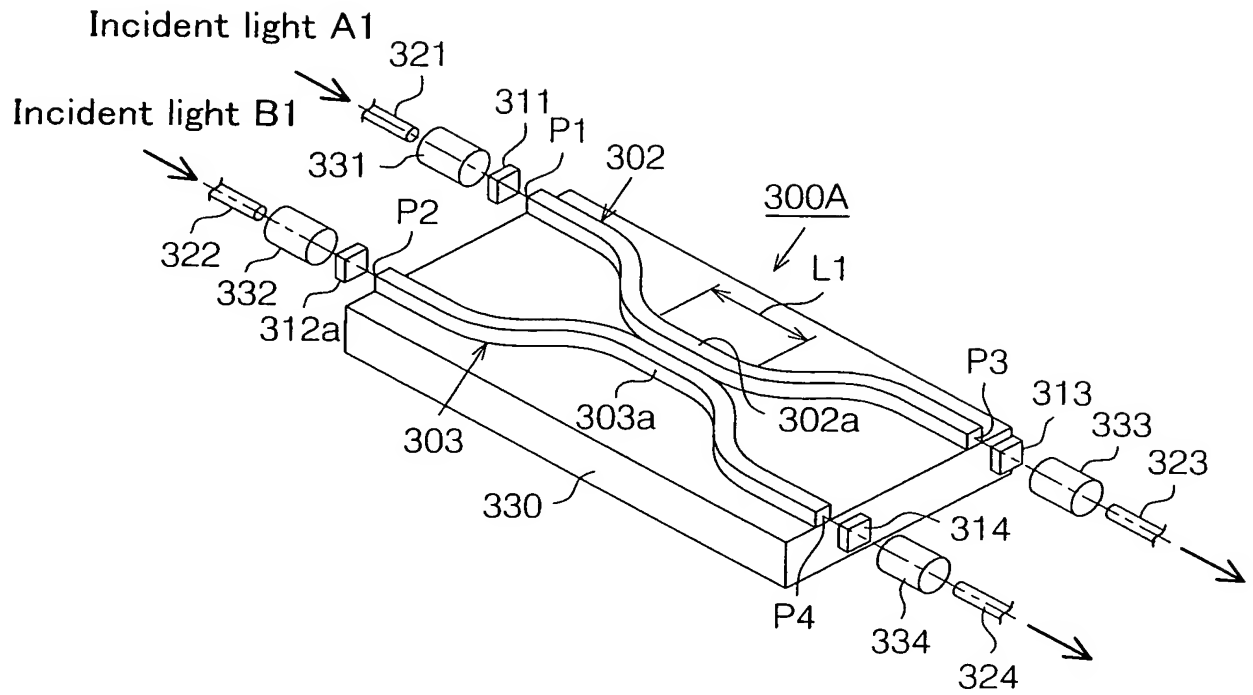


Fig.56

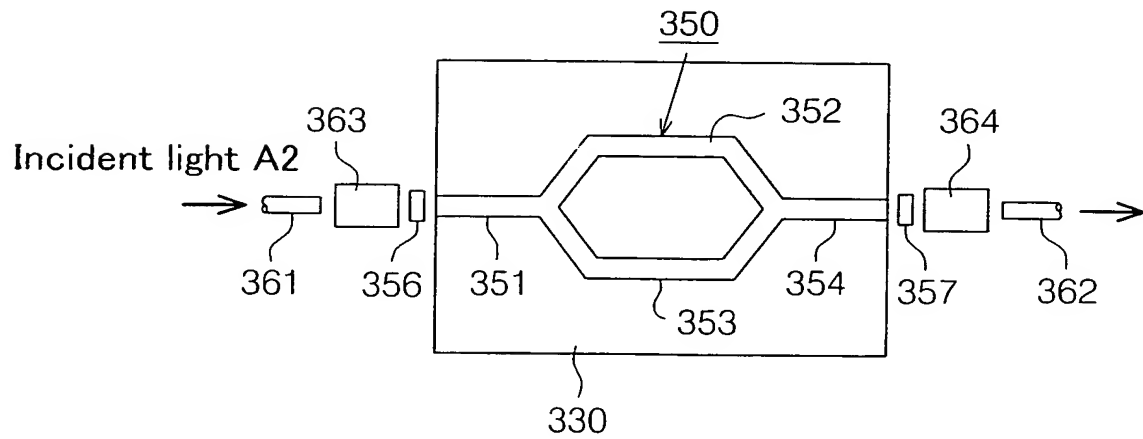


Fig.57

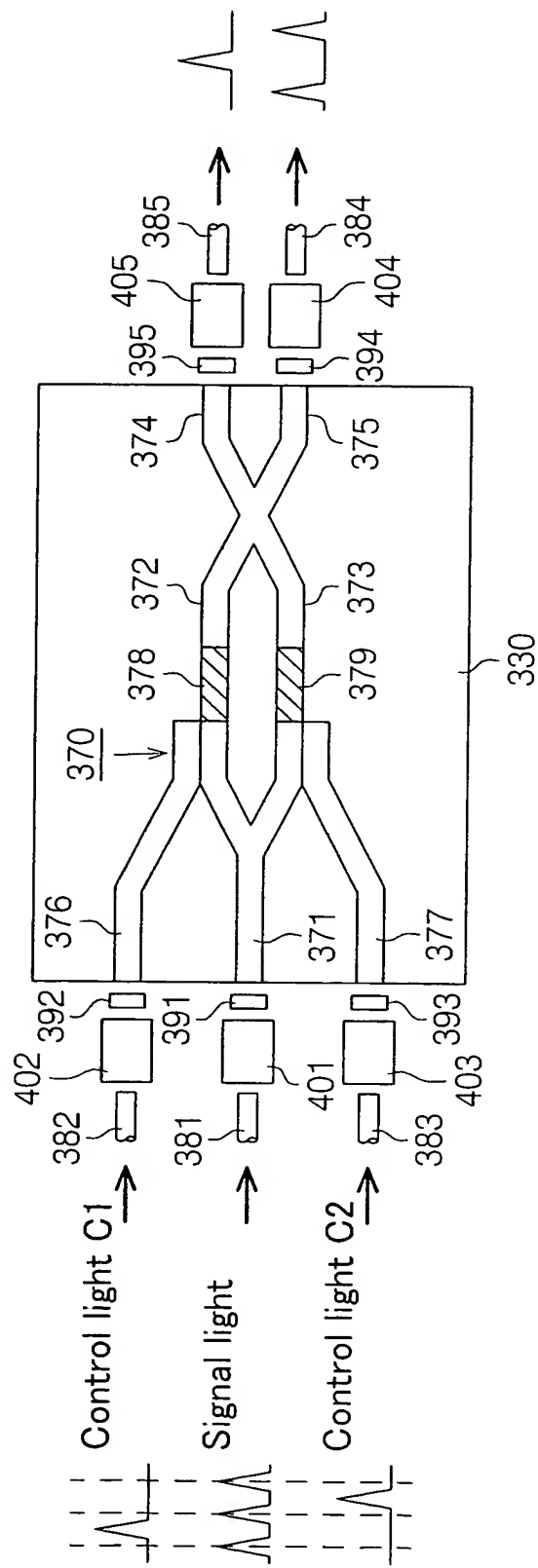
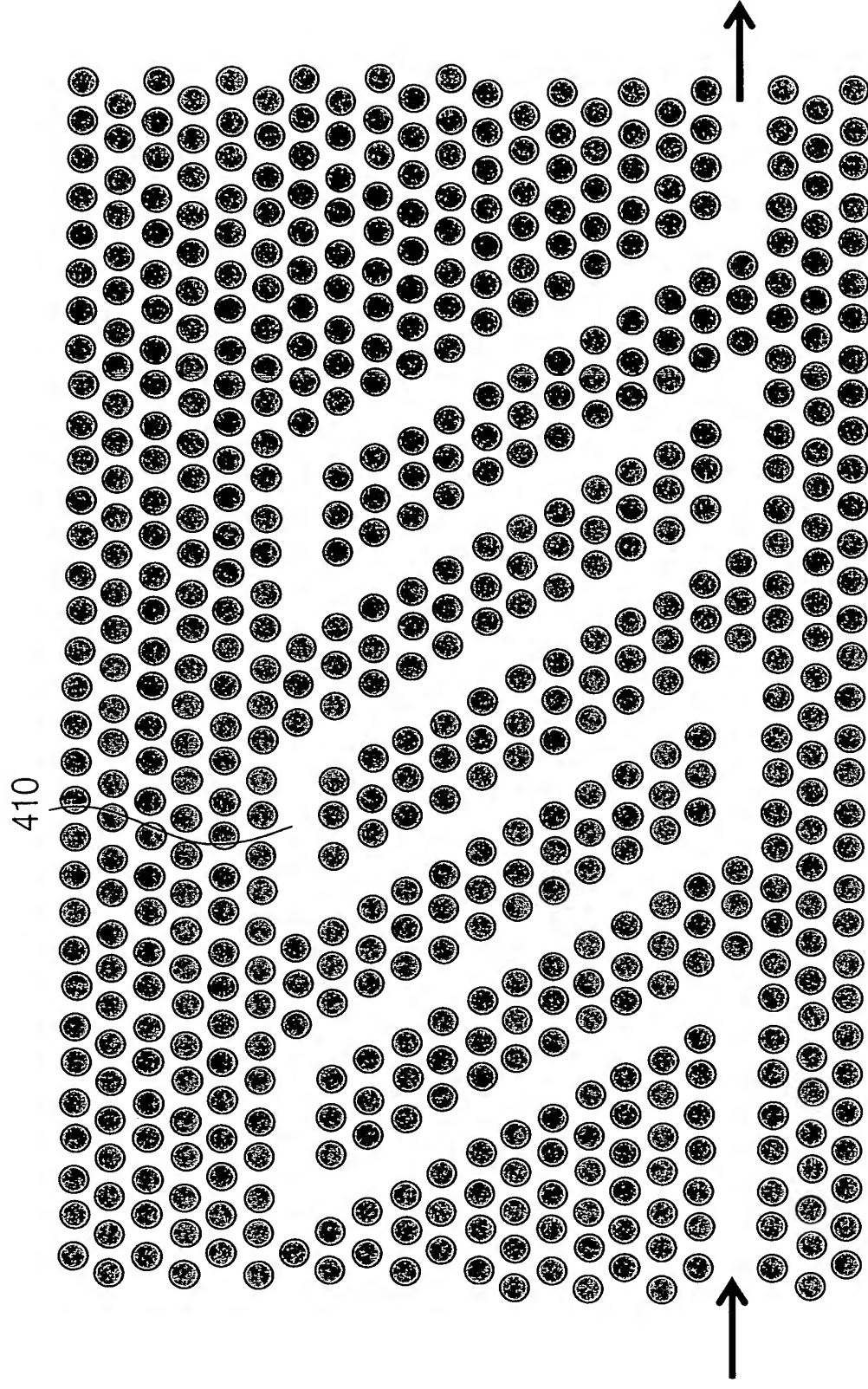


Fig. 58



Example of delay line by defect waveguide in two-dimensional photonic crystal

Fig. 59

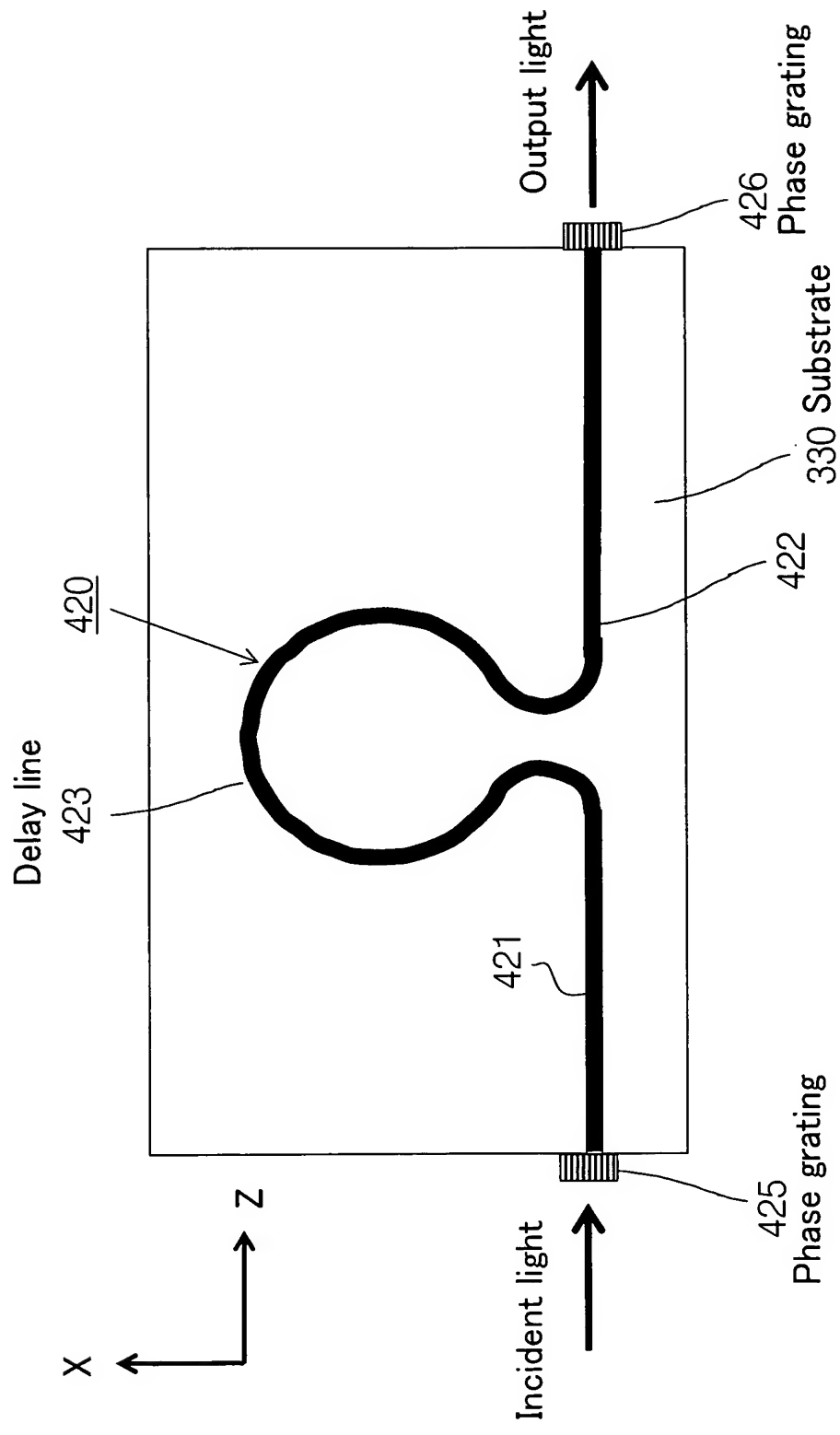


Fig. 60

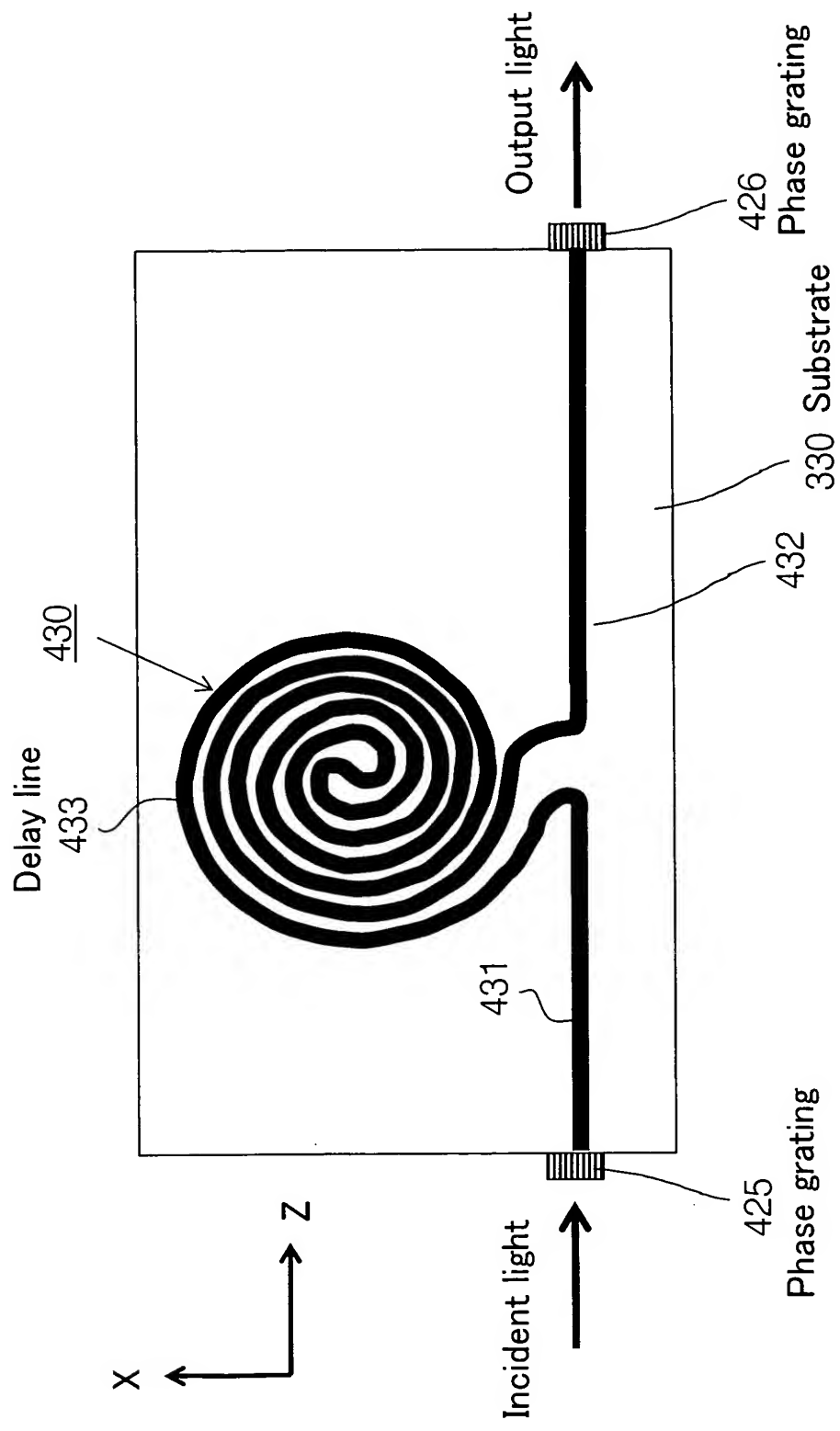


Fig. 61

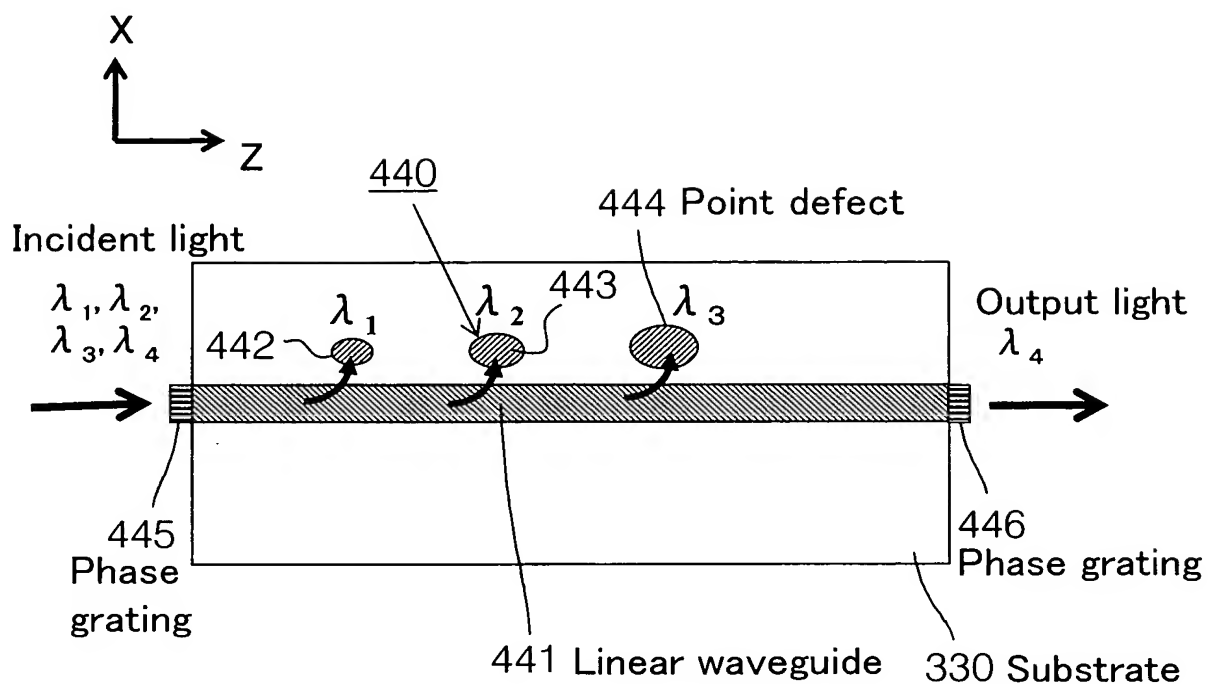


Fig. 62

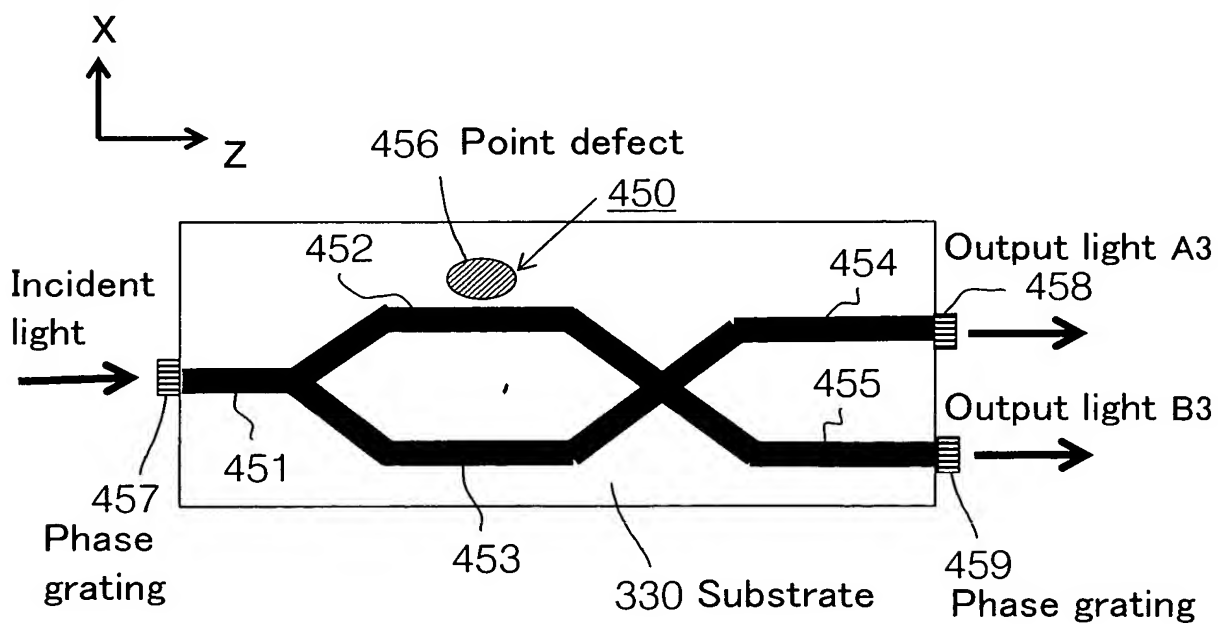


Fig. 63

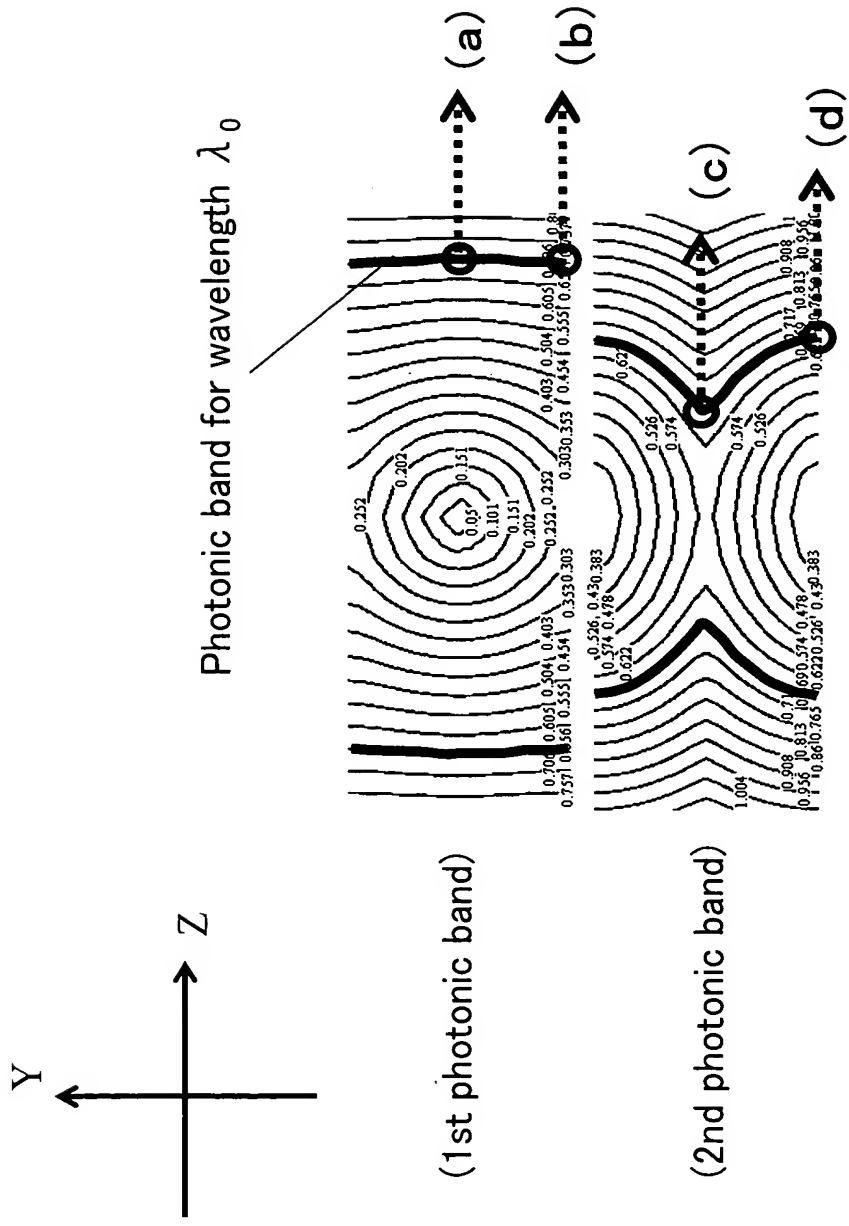
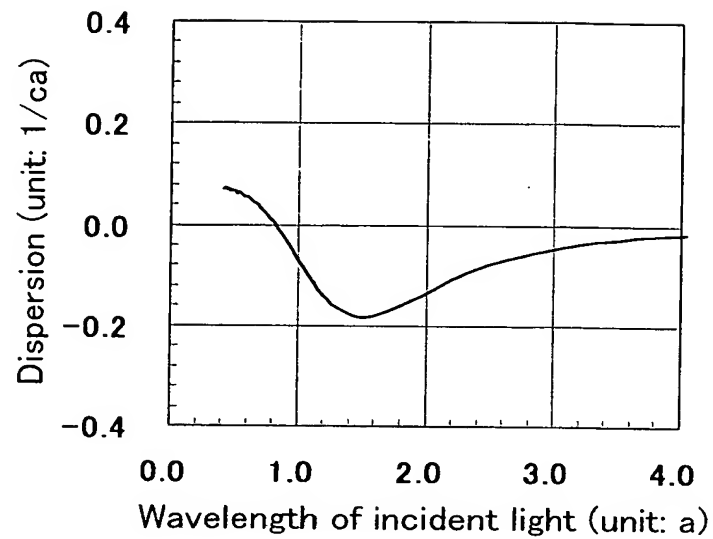
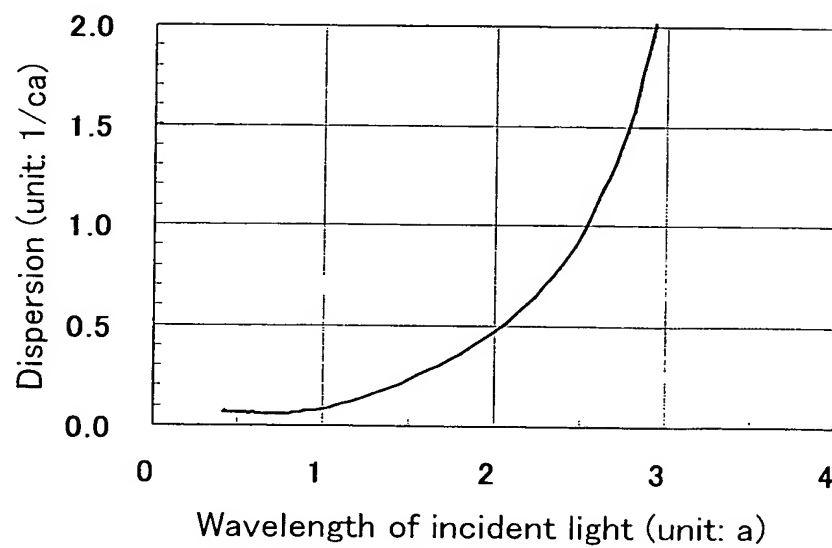


Fig. 64



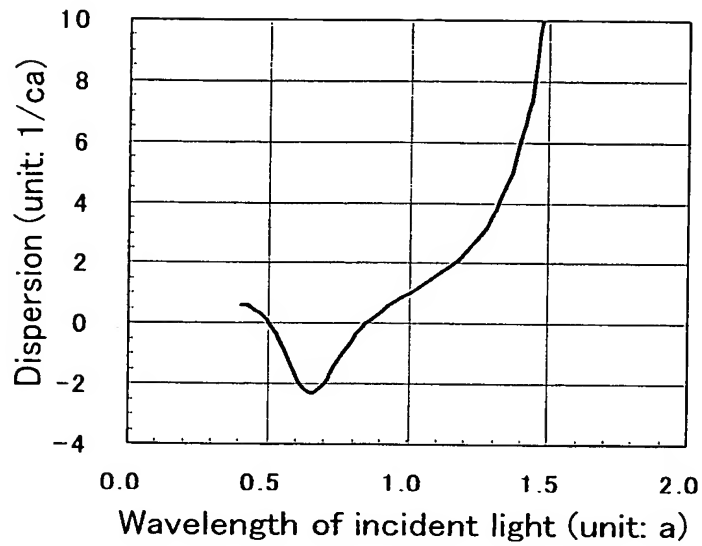
(a)

Fig. 65



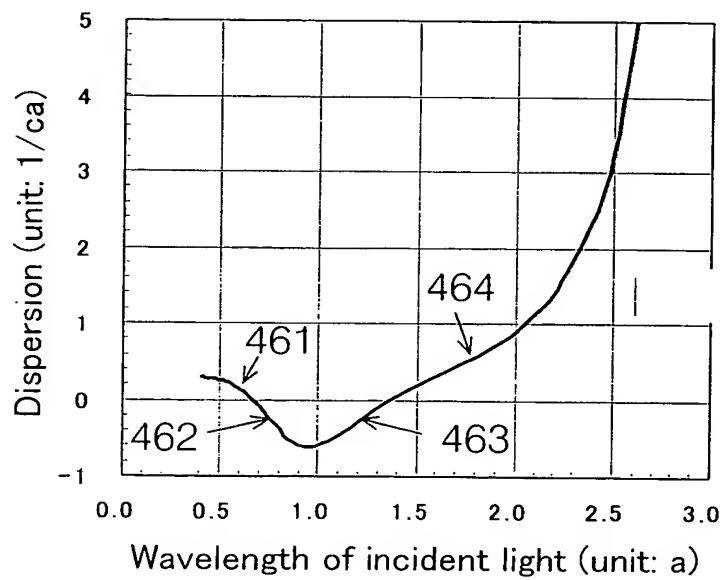
(b)

Fig. 66



(c)

Fig. 67



(d)

Fig.68

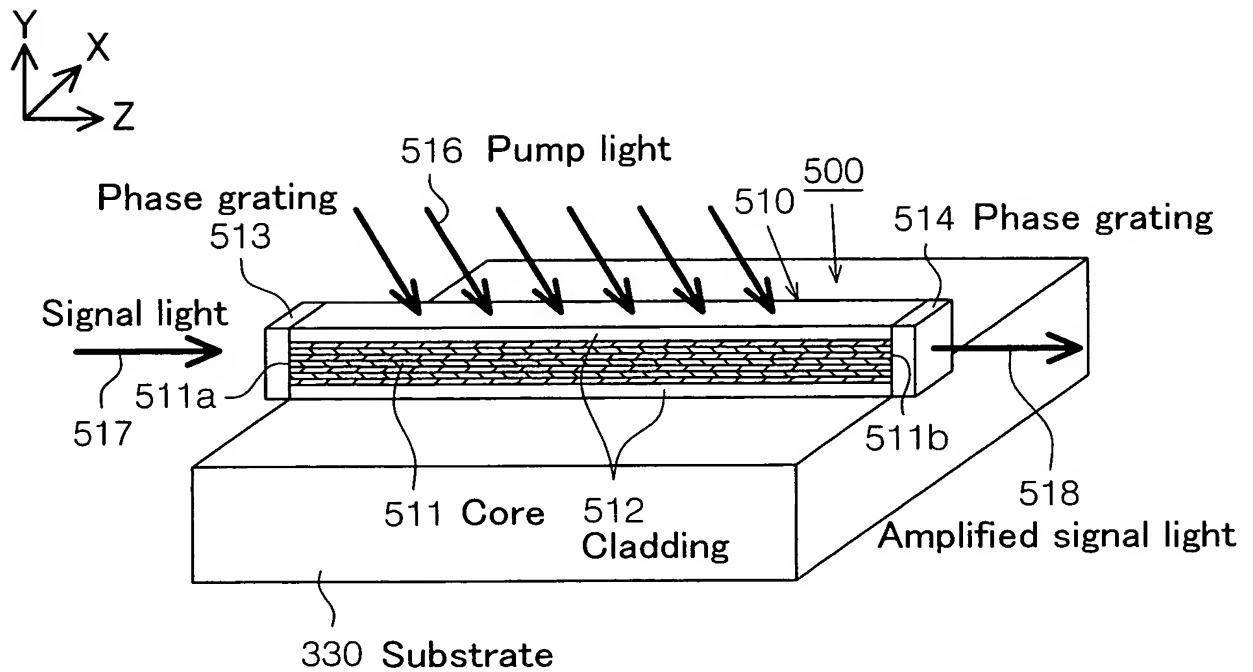


Fig.69

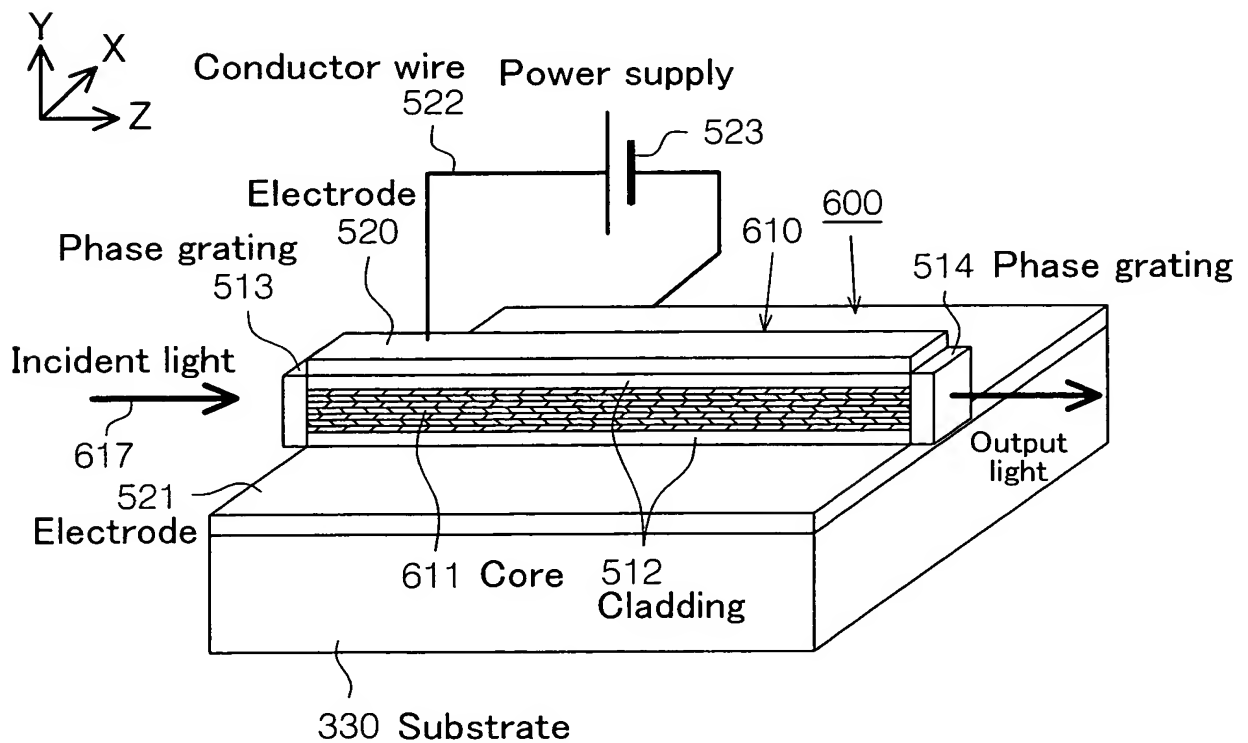


Fig.70

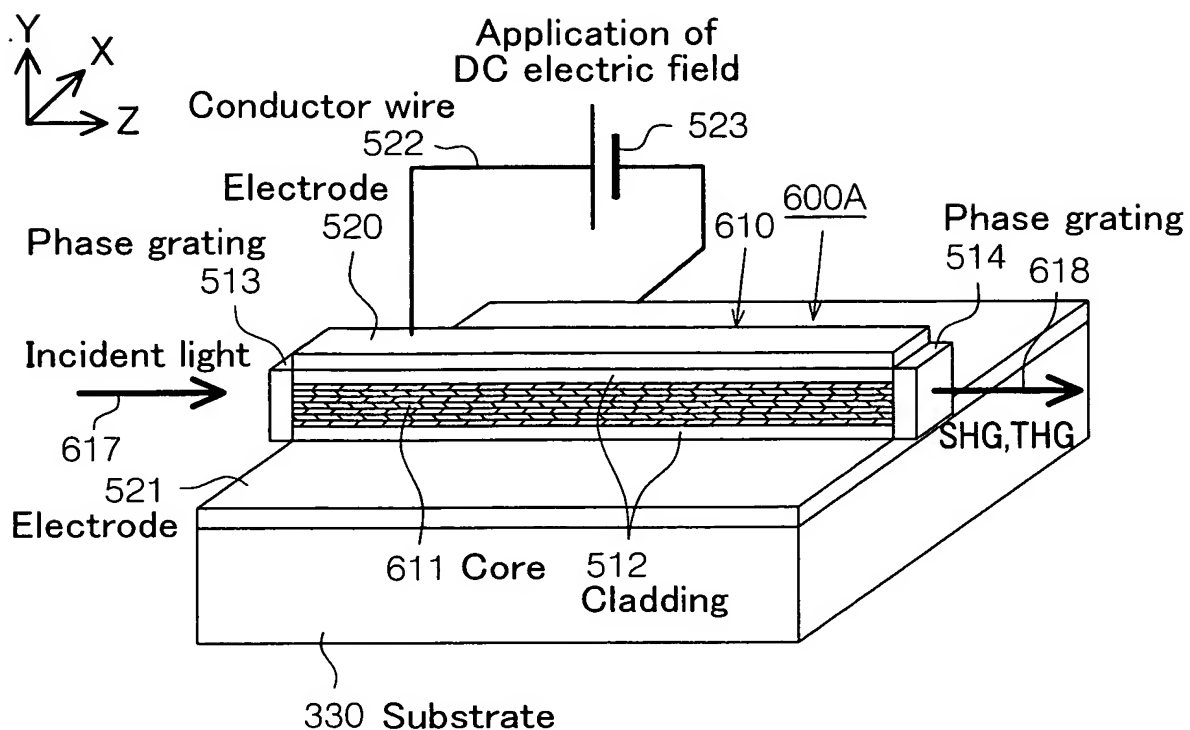


Fig.71

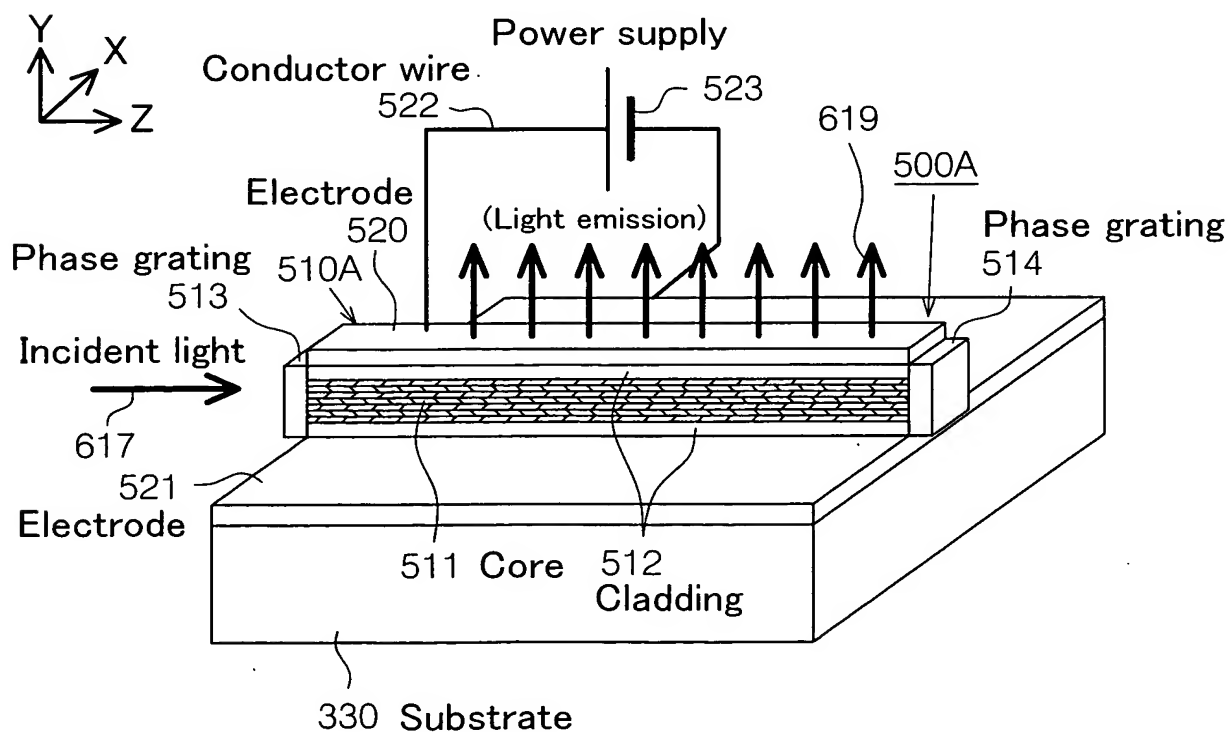


Fig.72

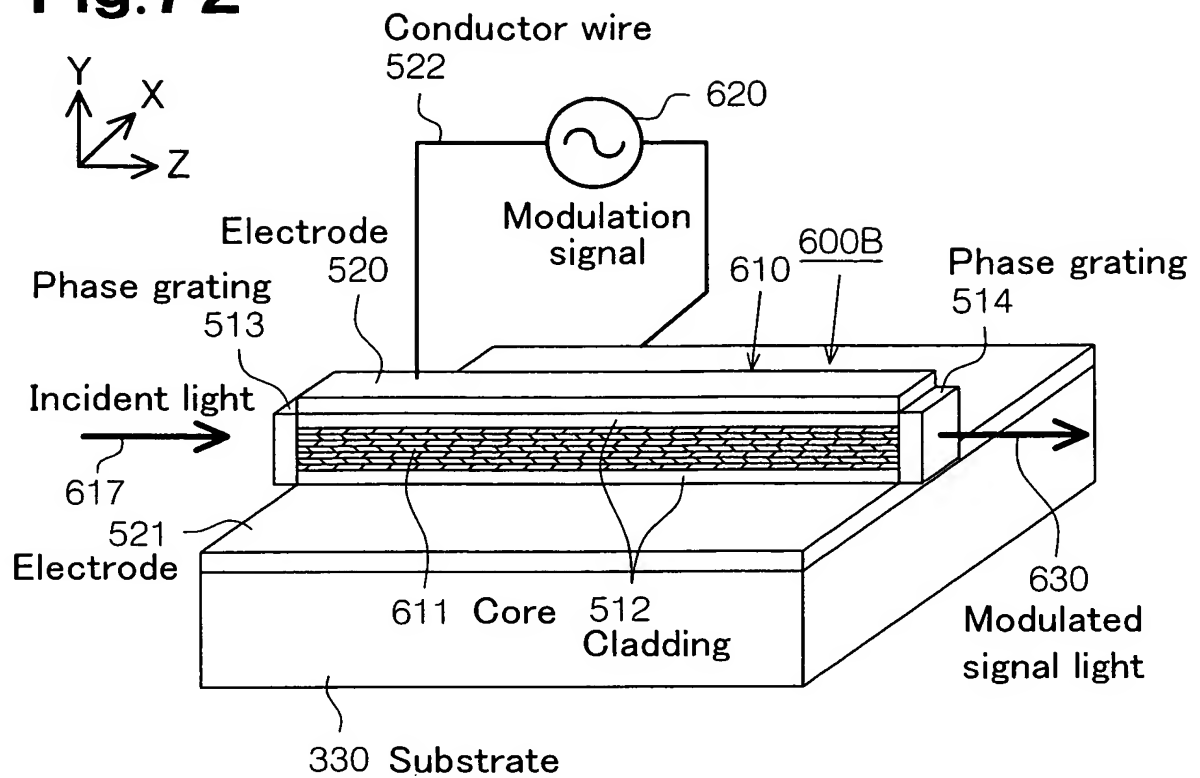


Fig. 73(a)

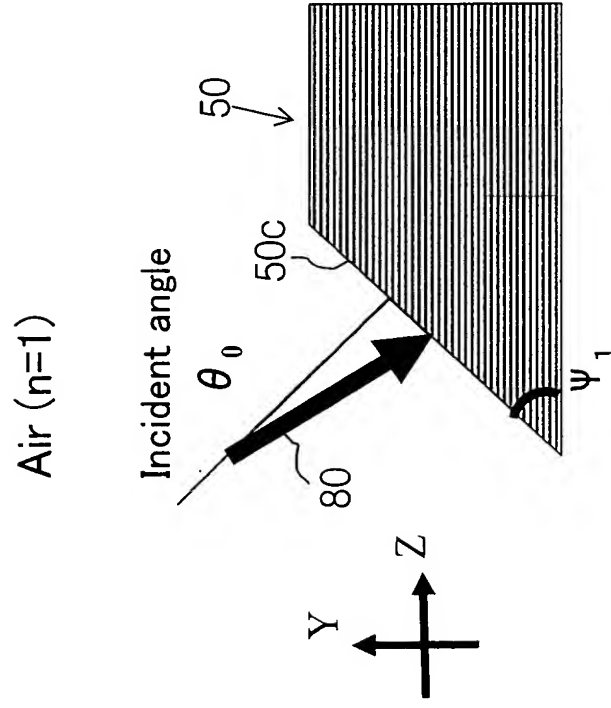
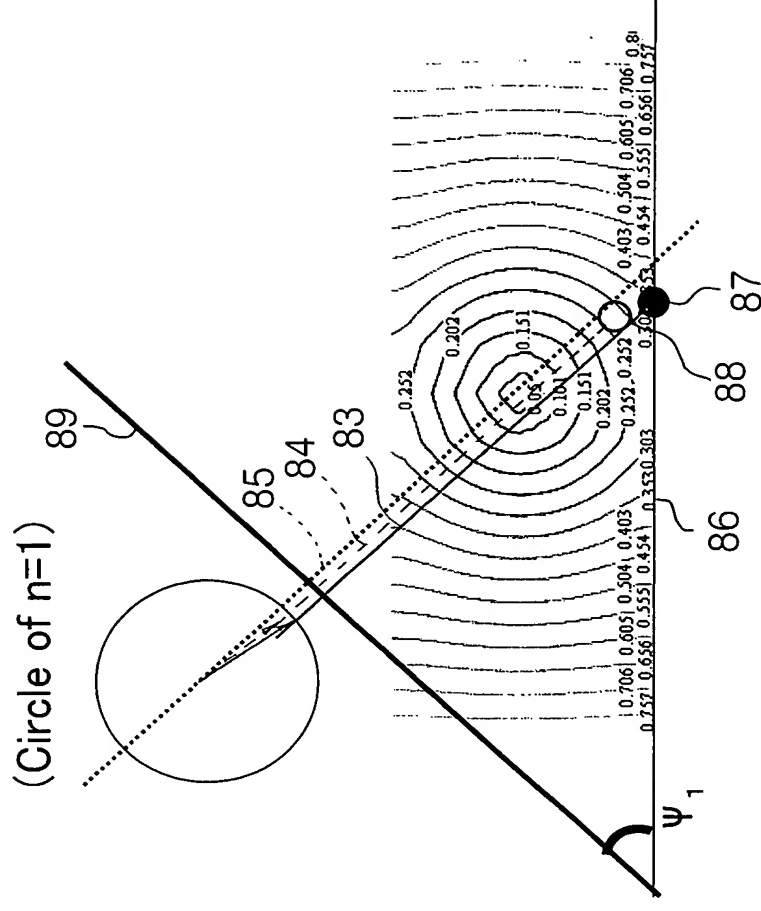


Fig. 73(b)



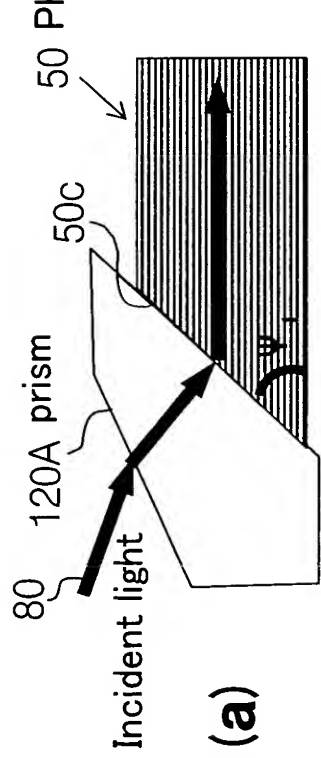
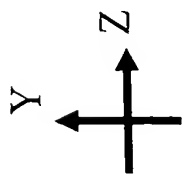


Fig. 74 (a)

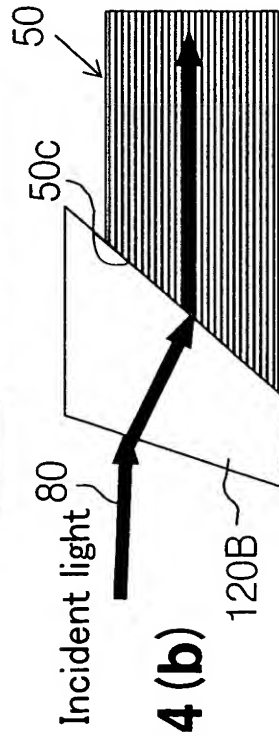


Fig. 74 (b)

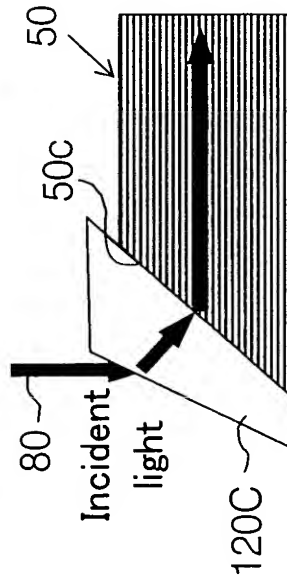


Fig. 74 (c)

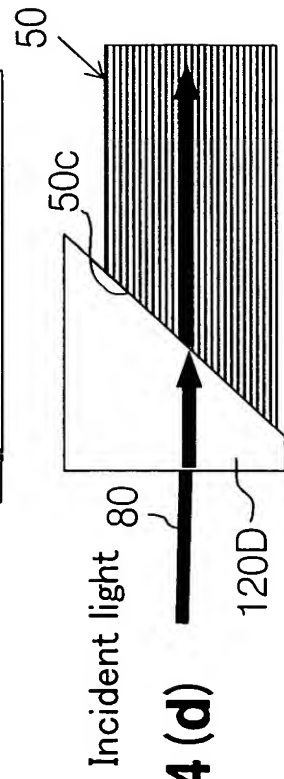


Fig. 74 (d)

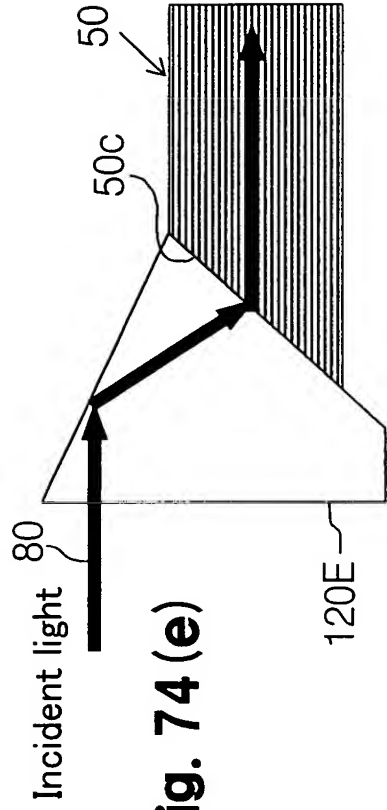


Fig. 74 (e)

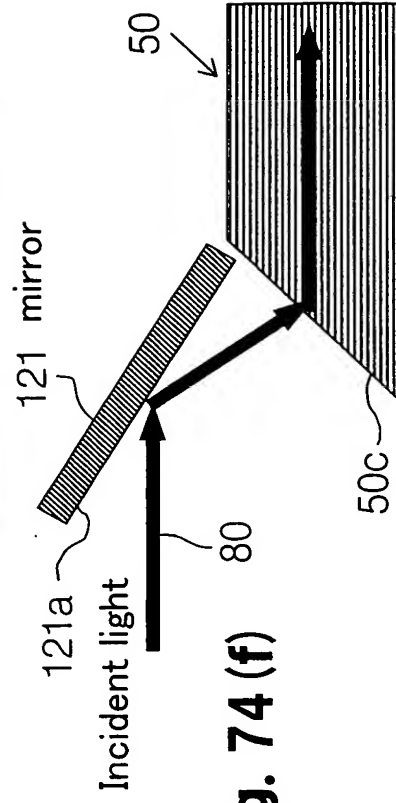


Fig. 74 (f)

Fig. 75(b)

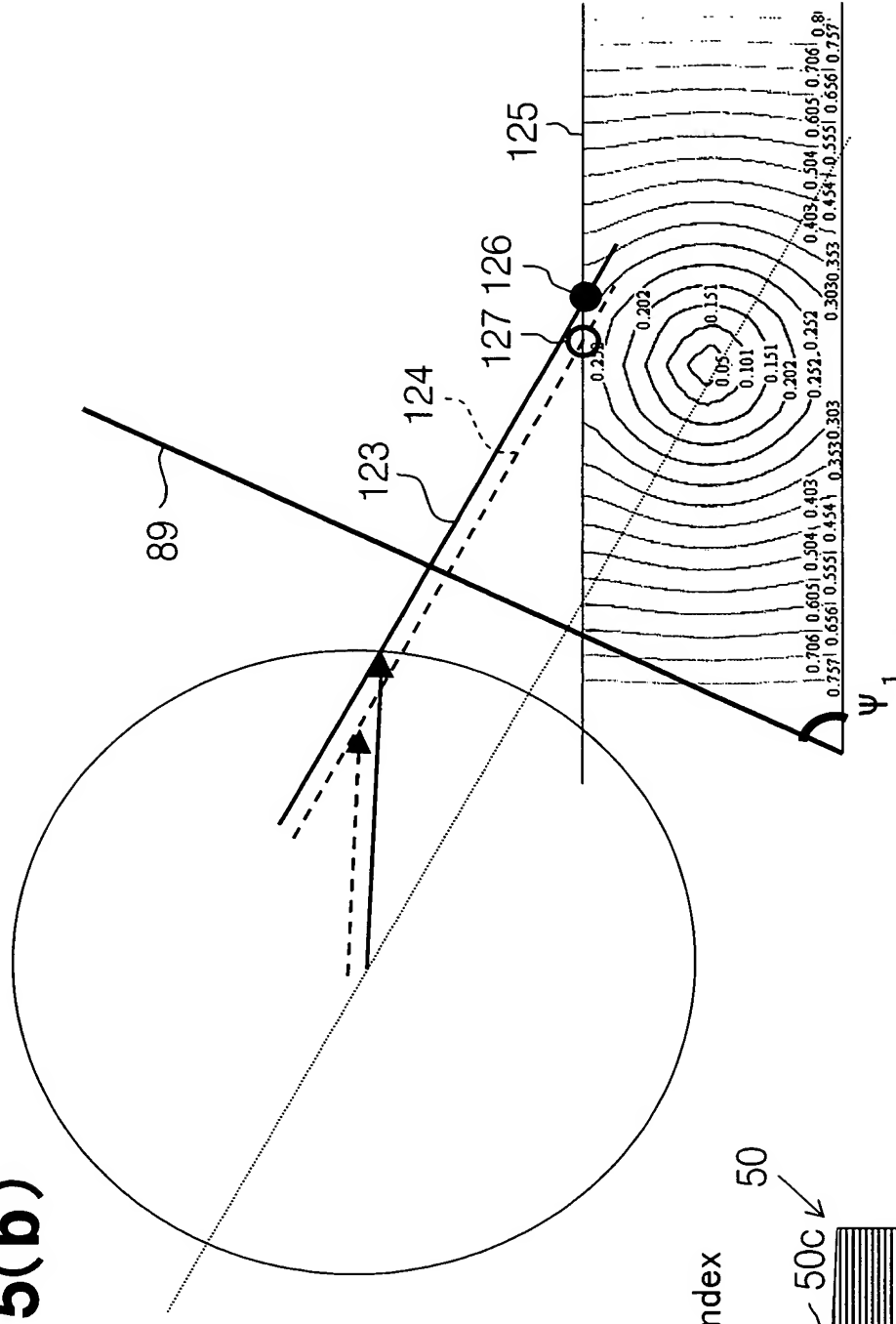
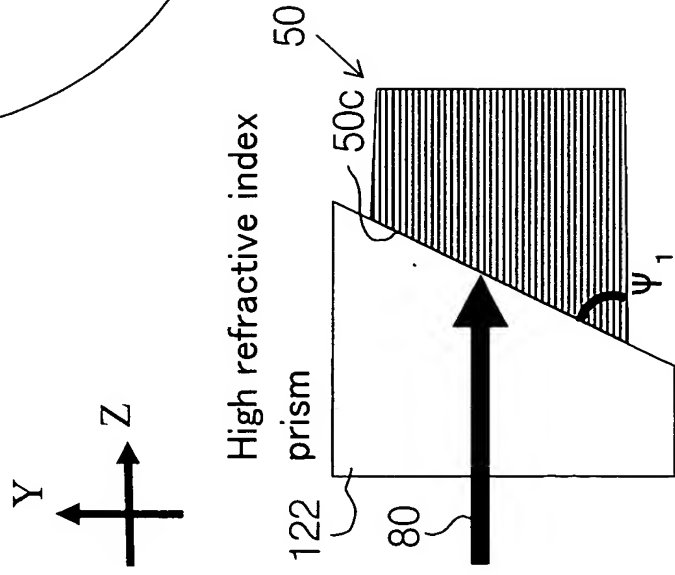


Fig. 75(a)



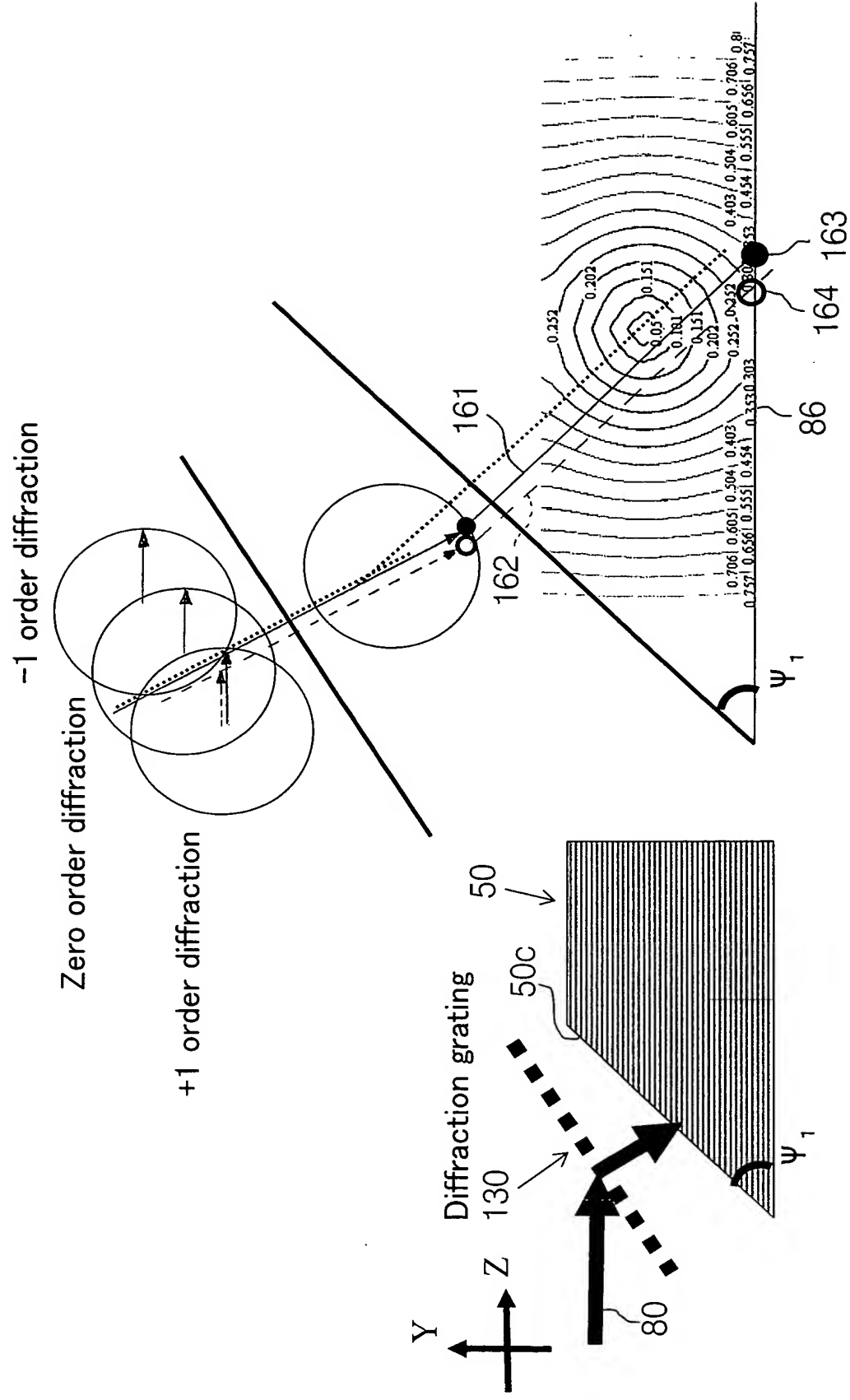


Fig. 76(a)

Fig. 76(b)

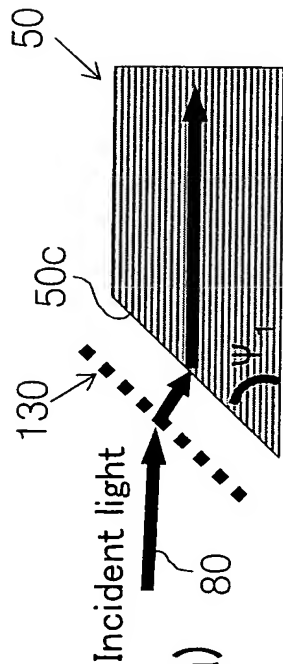
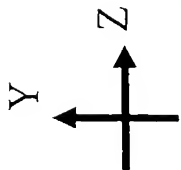


Fig. 77 (a)

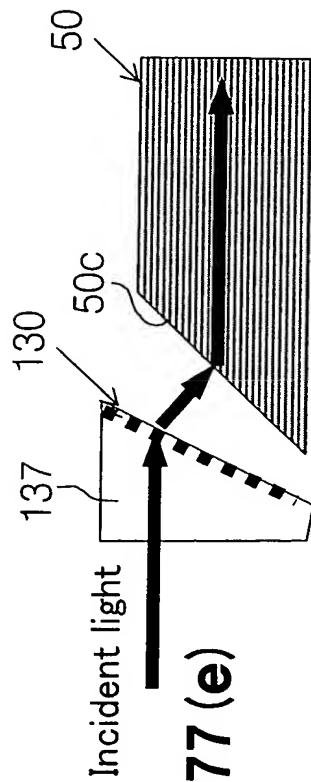


Fig. 77 (e)

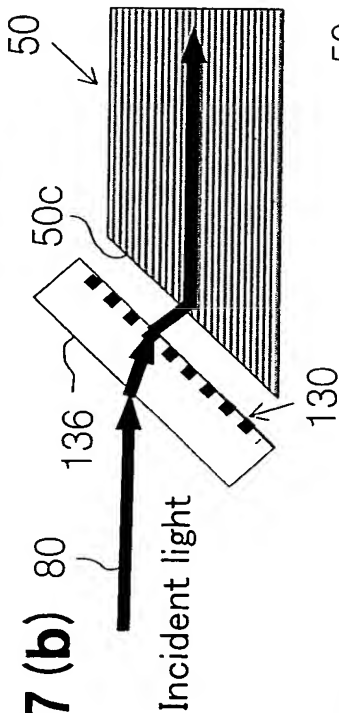


Fig. 77 (b)

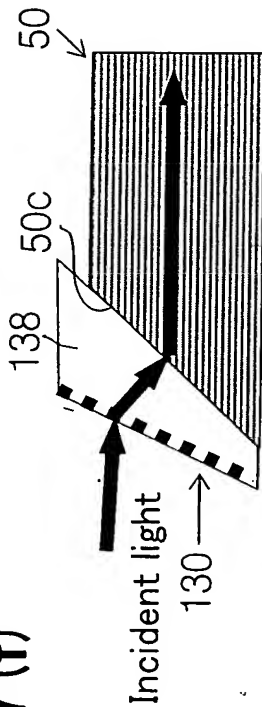


Fig. 77 (f)

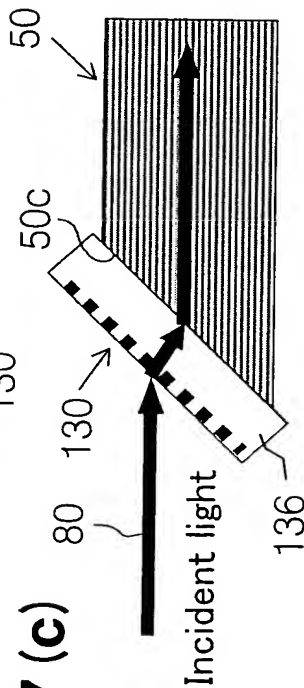


Fig. 77 (c)

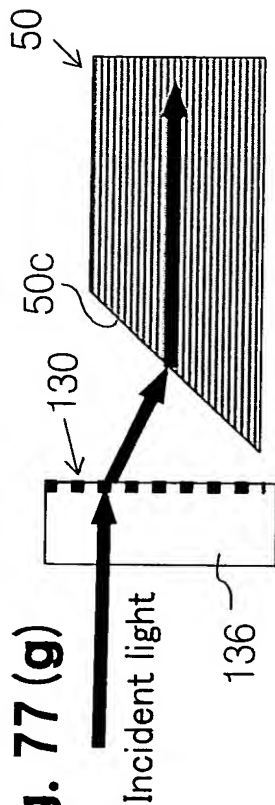


Fig. 77 (g)

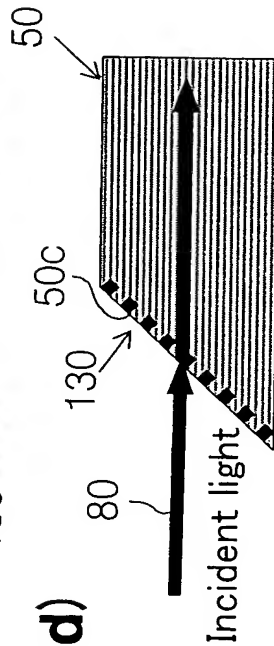


Fig. 77 (d)

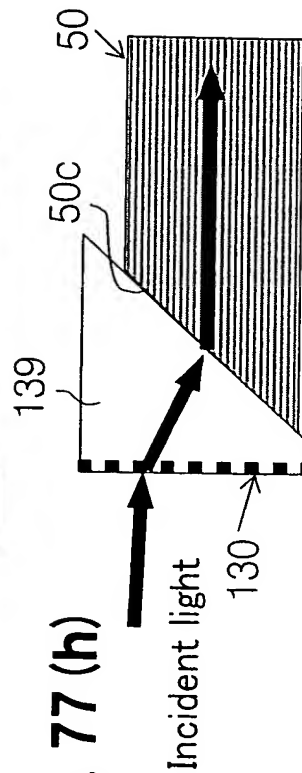


Fig. 77 (h)

Fig. 78(b)

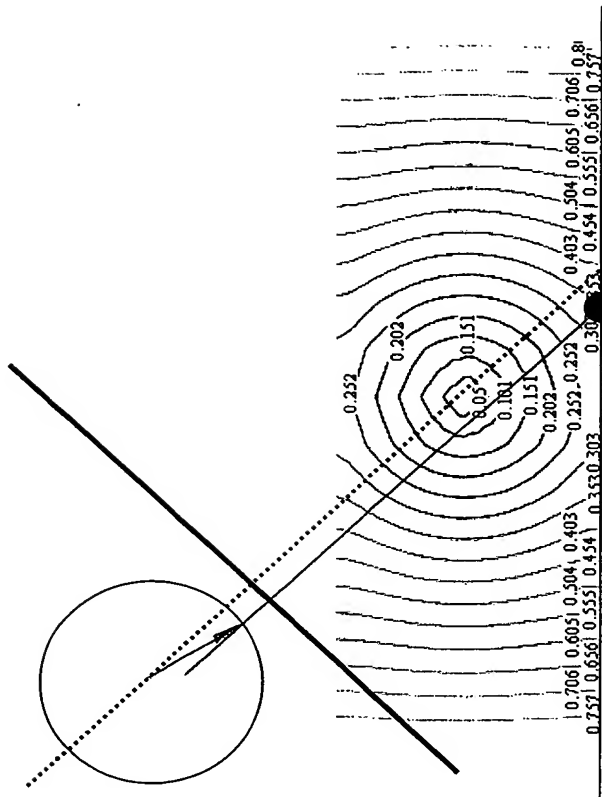


Fig. 78(a)

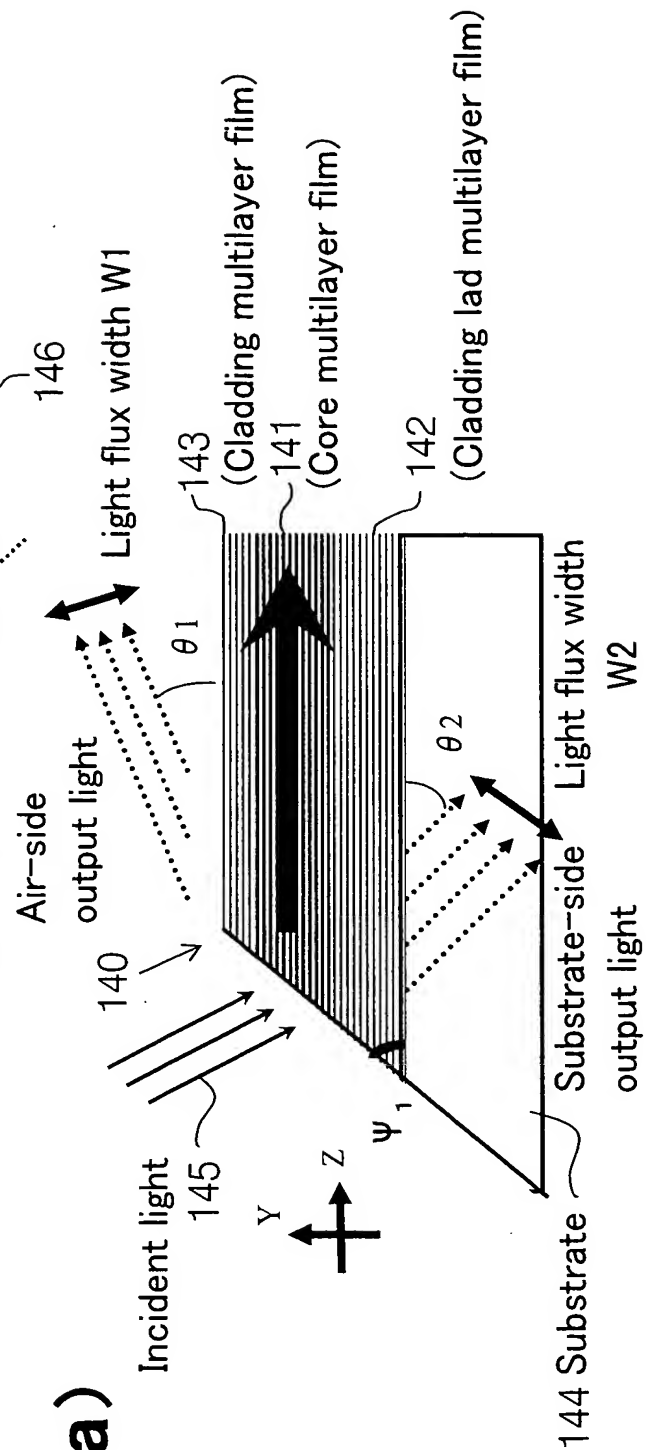


Fig. 79(a)

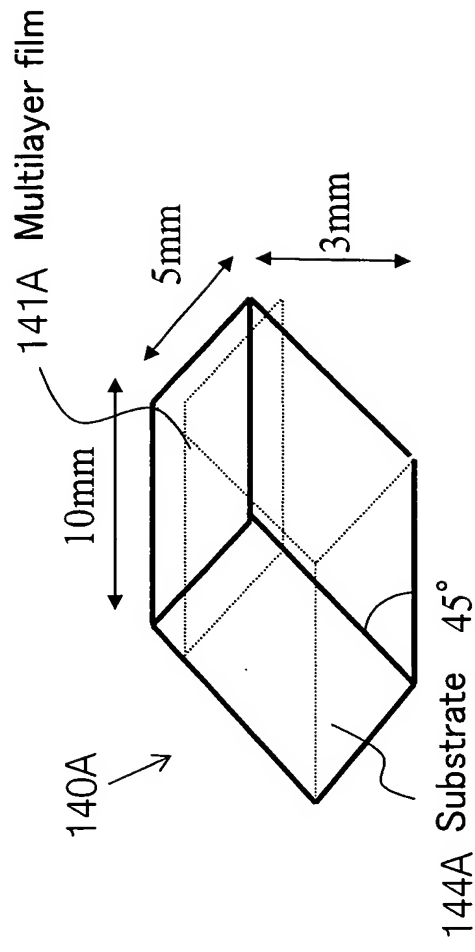


Fig. 79(b)

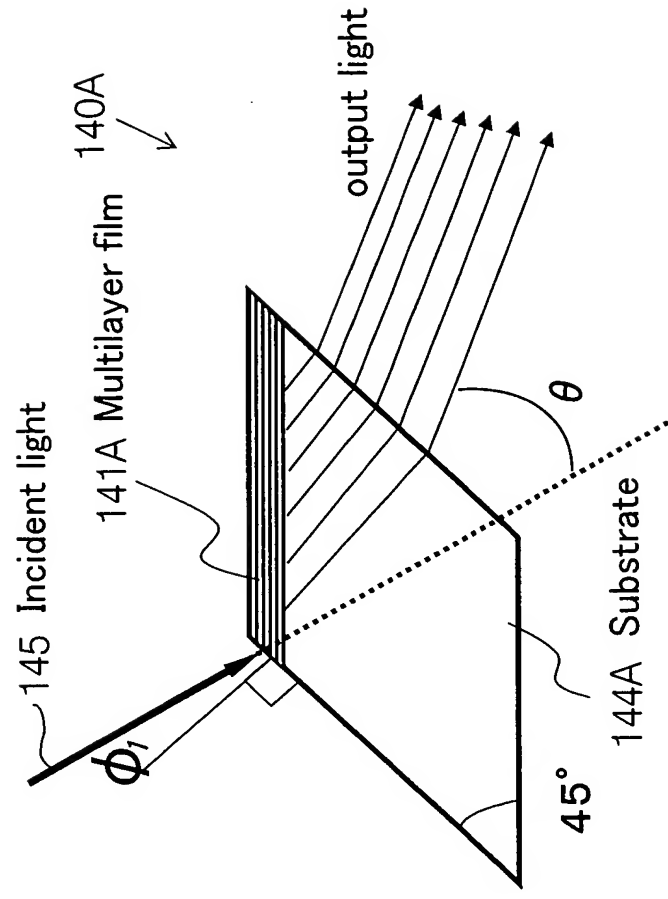


Fig. 80

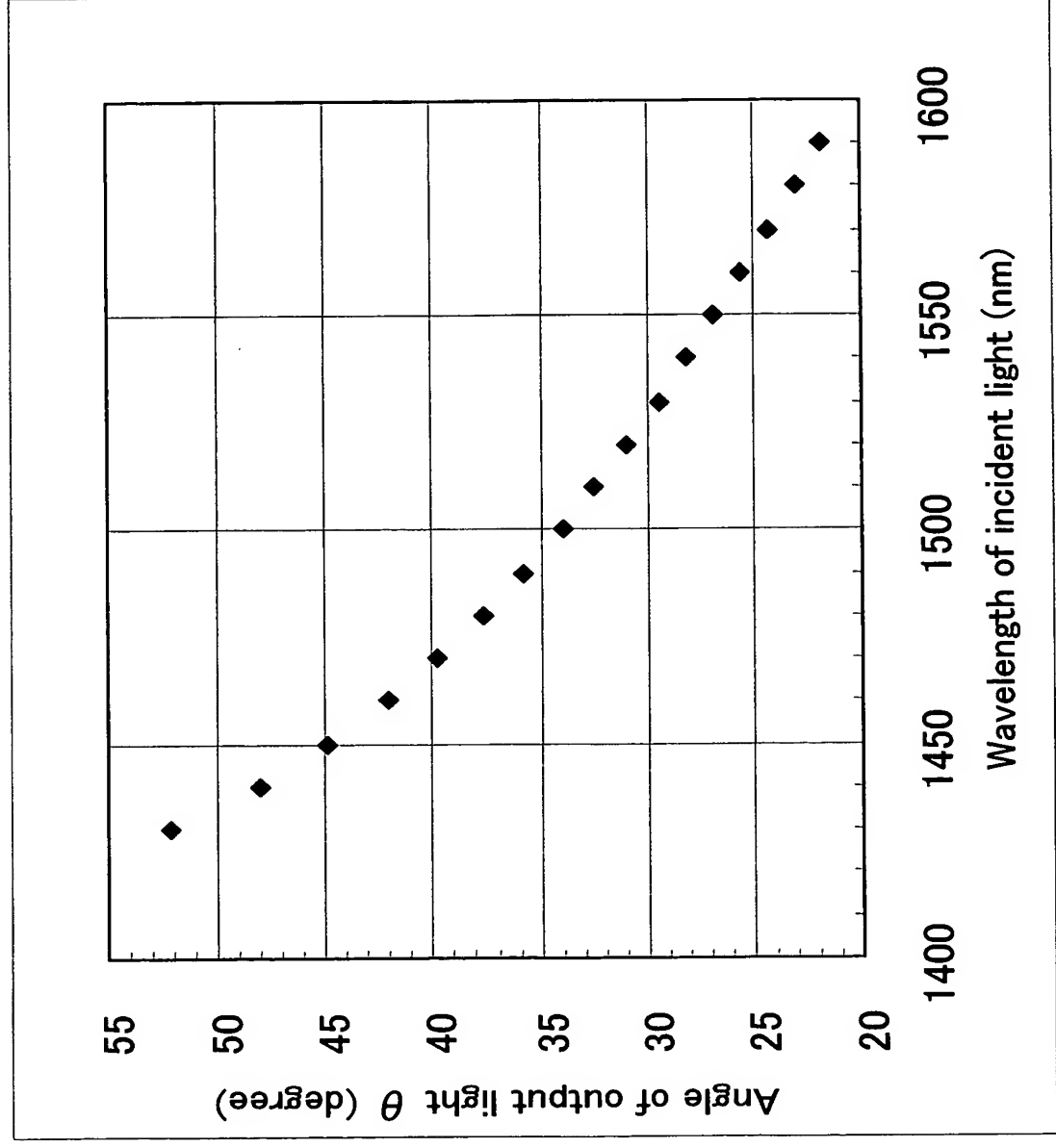


Fig. 81(a)

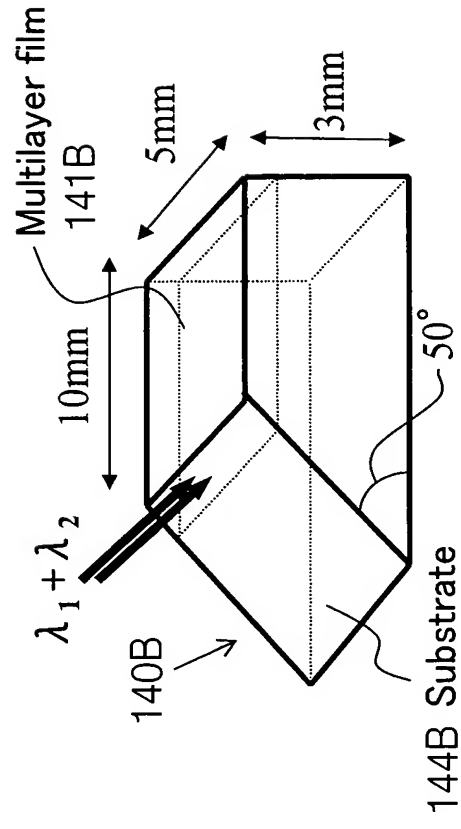


Fig. 81(b)

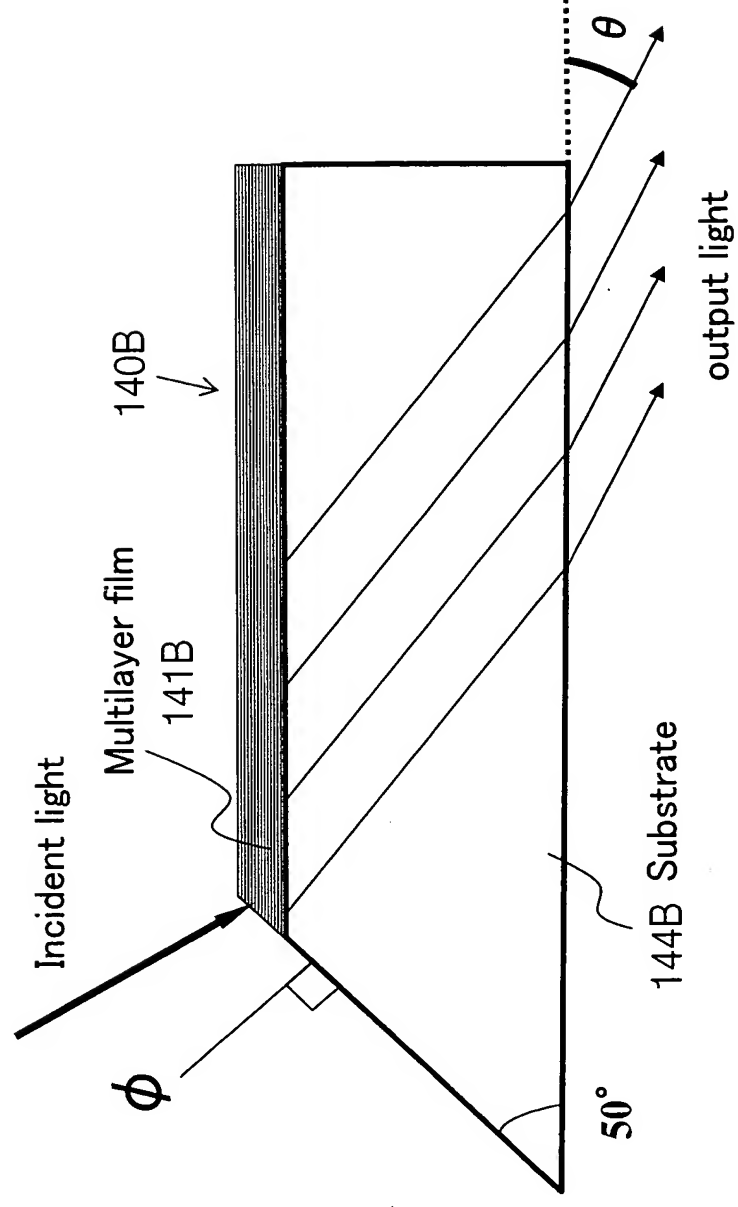


Fig. 82

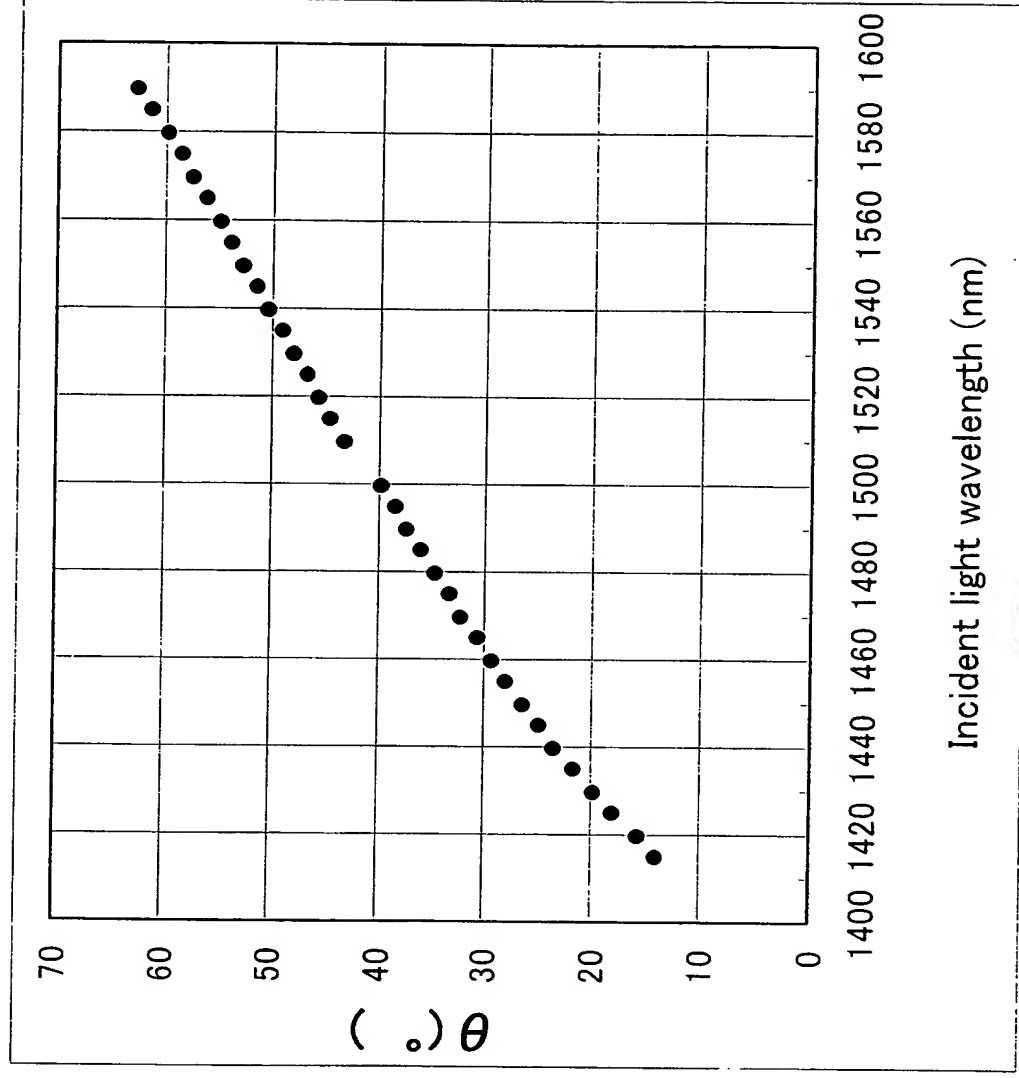


Fig. 83

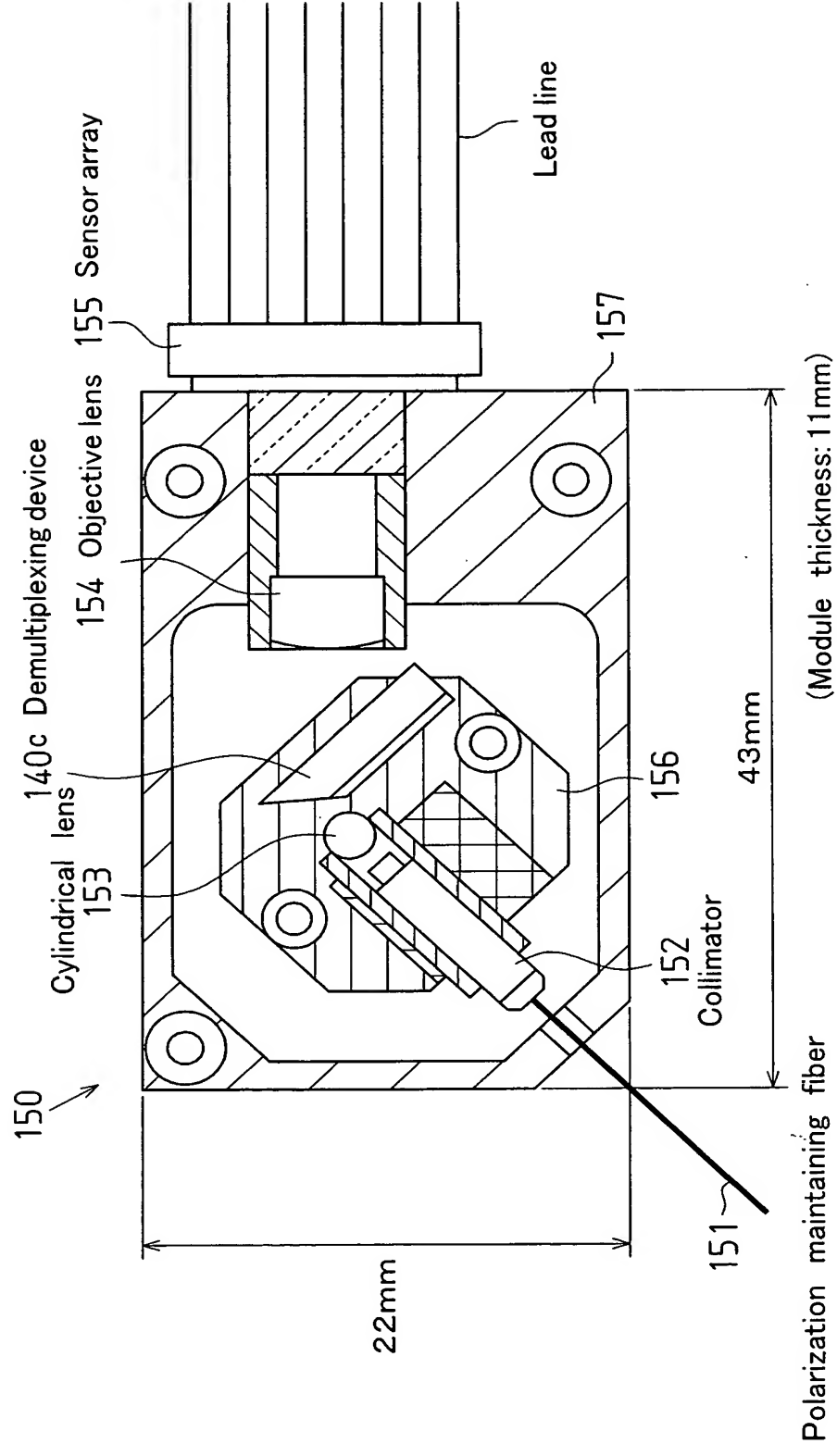
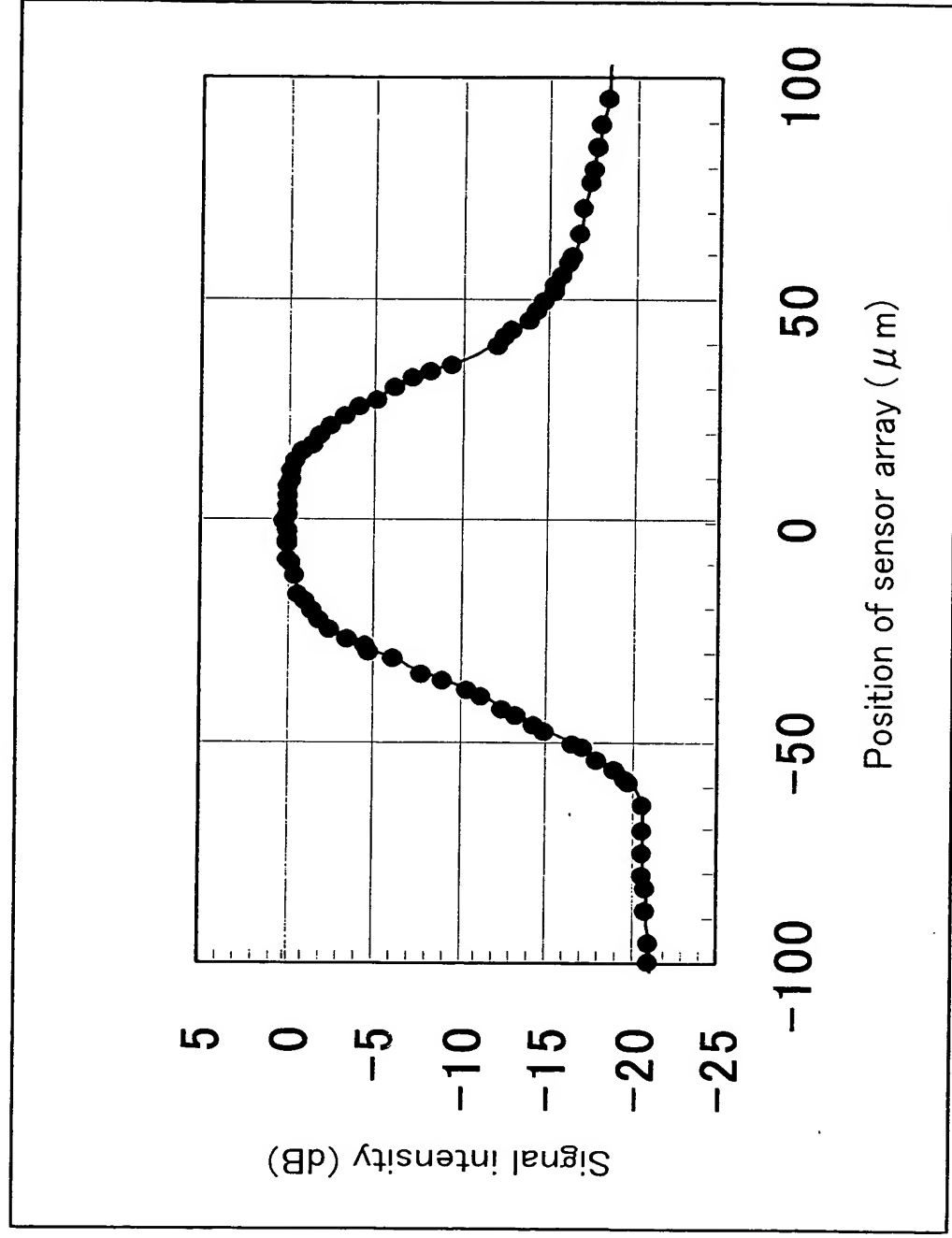


Fig. 84



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